

AUSTRALIA AND NEW ZEALAND

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AUSTRALIA AND NEW ZEALAND

By WILLIAM *and* DOROTHY IRWIN

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Table of Contents

| | PAGE |
|--------------------------------------|-------|
| THE COMMONWEALTH OF AUSTRALIA | 1 |
| A Land of Fun and Sunshine | 1 |
| A Nation Is Born ✓ | 16 |
| The Land the Explorers Found ✓ | 33 |
| A Brave Explorer ✓ | 50 |
| The Wonderful Animals of Australia | 65 |
| Birds That Work and Play | 78 |
| More Wonders of Australia | 91 |
| Stone-Age Men | 106 |
| The Wide, Warm Spaces | 125 |
| Enemies of the Farmers | 139 |
| Thrills on a Sheep Station ✓ | 154 |
| The Story of Australia's Gold ✓ | 171 — |
| Australians at Work | 191 |
| A Nation Grows Up — | 204 |
| NEW ZEALAND—THE LONG, BRIGHT LAND | 219 |
| How Maui Caught His Fish | 219 |
| Maoris and White Men | 232 |
| Where the Earth Grows and Spits | 246 |
| The Birds and Animals of New Zealand | 260 |
| A Changing Land | 272 |
| Tommy Smith, New Zealander | 287 |
| APPENDIX | 300 |
| GLOSSARY | 302 |

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To
ANN
and
PAM

whose parents are New Zealanders;
whose home is Australia;
and who learned to love American children
when at school in New York.

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NEW ZEALAND CONSULATE

A snow-covered, steaming volcano in New Zealand.

The Commonwealth of Australia

A LAND OF FUN AND SUNSHINE

Far away across the sea is a big sunny country. Australia is its name. It is on the other side of the Pacific Ocean from America. You must go to Australia someday. The Australian people are kind and friendly like the people of all lands. They speak English. They live in cities and in country towns. Some live and work on farms. Others work in factories and offices. Australian children go to schools that are much like ours in the United States.

But Australia is different from the United States in many ways. If you go to Australia, you will see that the trees are not like ours. The Australian wild animals are different from ours. The Australian birds and flowers are different, too.

Do you like animals? The Australian animals are fun. Not long ago we saw one in the Australian woods. It was as big as a deer, but it jumped along on its hind legs. Its front legs did not touch the ground at all. It jumped over bushes and logs and a wire fence. Then it stopped and looked around. It stood up on its hind legs and on its long, heavy tail.

Can you guess what that animal was? It was a *kan-garoo*. There are many thousands of kangaroos in Australia.

Later that day we saw a mother kangaroo. She had a kind of pocket in her fur. She carried her young one in this pocket, which was in the front of her body. We could see the baby kangaroo peeping out at us. Then off went mother kangaroo. Baby kangaroo had a wonderful ride as its mother went jumping along.

There are many other strange animals in Australia. Have you ever heard of a *platypus*? When we first saw a platypus, we could hardly believe our eyes. What was the platypus—an animal or a bird? It seemed like a bit of both. For this odd little fellow had webbed feet and a flat beak like a duck. But it did not have feathers. It had fur!

Have you ever heard a bird laughing? Australia has a bird that laughs. At least it makes a noise like a laugh. Australians sometimes call this bird the “laughing jack-ass,” but its real name is the *kookaburra*.

In Australia most of the land outside the cities and towns is called the *bush*. When Australians say “the bush,” they mean many different kinds of land. They may mean the mountains, or they may mean the flat lands called plains. They may mean the forests or they may mean the very dry lands called deserts. Mountains, plains, forests, and deserts are all called “the bush” by Australians.

How would you like to get on a horse and go riding in the bush? The wild animals will not hurt you, but it is easy to get lost. The Australian bush is very, very big, and there are not many trails.



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The black swan is the most graceful of the swan family.

It is fun riding in the bush. Here are some of the things you might see if you go to the right places:

Black swans.

Birds that cannot fly.

Animals that glide through the air.

Fish that climb trees.

Spiders that whistle.

Rivers without water in them.

Many of the trees in Australia are called *gum* trees. There are blue gums, red gums, white gums, and oh,

more than four hundred other kinds of gums. In America most of the trees shed their leaves in the fall. But the Australian gum trees keep their dark, gray-green leaves all the year round. Instead of shedding their leaves some gum trees shed their bark. Once a year the outer bark falls off in strips like thick brown paper. The clean, smooth trunks of these trees take on lovely colors.

In the spring some of the gum trees come out in flower, and the woods are like a garden. Wild flowers grow in many places. The glory of the bush is a flower called the *wattle*. When this flower blooms on a tree, it looks like a yellow cloud. Everywhere near it the air smells sweet.

The wattle is a small tree. It is often only a bush. Many Australian trees, however, are tall and straight. Some of them are almost as high as the wonderful big trees of California, which are the tallest living things in the world.

The tall Australian forests grow near the ocean. They grow in places which get a lot of rain. Trees do not grow tall on the Australian plains, which get little rain. The plains are far from the ocean. Those parts in Australia which are far from the ocean are called the *inland*.

Some of the inland parts of Australia may get no rain for months or even years. So the inland plains are often dry. We know a young Australian child who lived in the inland. He had never seen rain. He had never seen a river. He had never seen a pond. All he had seen was a puddle under the tap of a water pipe.

One day when he was nearly five years old his mother took him to the seashore. The first thing he saw was the ocean. "Oh," he cried, "what a puddle!"

Only a few white people live in the inland. Yet some other fine people live there—a race of black hunters called *aborigines*. Their people lived in Australia before the white men came. About 300,000 aborigines once lived in all parts of Australia. Like the red Indians in America they lost most of their hunting grounds. Today only about 60,000 black Australians are left.

Some of the aborigines live and work like white men. Others still live in the old way of their people. They

These gum trees have shed their bark. Strips of bark lie on the ground around them.

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Santa Claus and children cool their feet in a fish pond on a hot Christmas day.

wander and hunt on the plains and in the northern woods. They do not stay in one place long enough to build houses. They do not wear clothes. They live much as all peoples, black and white, lived many thousands of years ago.

Christmas in Australia

Australian children know a good deal about America. They go to American movies, and they read American books and magazines. They see American comics in their newspapers, and they play at being red Indians. They like games and parties, and they have fun at Christmas time.

The story of Santa Claus was first told in cold countries. Christmas in those countries comes in the winter-time. So the story of Santa came to be a winter's tale. People everywhere think of Santa coming through the snow with the merry jingle of sleigh bells.

If Santa went to Australia, he would get a surprise. He would find no snow in Australia at Christmas time, for Christmas in Australia comes in the middle of summer. Why is this? Why does Christmas come in summer-time? The answer is quite easy. It is because Australia lies in the southern half of the world.

If you look at the map on page 35, you will see what that means. To the north of Australia you will see a line called the *equator*. The equator divides the world into two parts—a northern half and a southern half. The United States is north of the equator. Australia is south of the equator. In all countries south of the equator the seasons are the opposite of ours.

We think of June and July as summer months. They are winter months in the southern half of the world. We think of September and October as the autumn or fall. They are spring months south of the equator.

When it is spring in our country, it is autumn in Australia.

So Santa would find Christmas different in Australia. It is not a cold, white Christmas as in the northern parts of our country. It is a hot, brown Christmas without snow or sleighs.

The Australians do not mind that. They have fun swimming and playing summer games. Australian children get their long vacation at Christmas time. They do not think much about snow. Indeed most Australian

children have never seen snow, even in winter. The weather is always too warm for snow except in a few parts of the country.

Santa would not know what to do with his sleigh. What use is a sleigh without snow? Still, there is no need to worry about Santa. He is only a kind of dream. We do not believe in him really. Yet we all believe in fun and kindness and good will, which is another name for friendship. That is what Santa means to Americans. That is what Santa—sleigh, winter coat, and all—means to Australians also.

Australian families are much like American families, or French families, or Chinese families. Father, mother, and children love to be happy together. They like to have fun with their neighbors. They do not like hunger, fear, and war. They all want a world in which the nations live together in peace and good will.

Look Out for Sharks!

Australians are fond of sports. In their warm, sunny weather they can spend a lot of time out of doors. They play tennis, football, and other games. They love to go swimming and rowing and fishing and boating. They love to go to the wide sandy beaches near their cities and towns. It is fun to swim in the waves that come rolling in from the ocean.

Come to Australia with us! Today, let us say, is a nice, hot day in January. We shall go to the beach and put on our bathing suits. How white and clean the sand is! How hot it is under our bare feet!

Hundreds of people in bathing suits are lying on the sand. Their skins have been burned brown by the sun.

Some people sit in the shade of big umbrellas of many colors. They watch the waves come rolling in.

Each wave seems smooth until it gets near the shore. Then it lifts itself up, curls over, and falls. It makes a noise like thunder. Foamy water rushes up the beach.

When the waves curl over and fall, people say that they are “breaking.” The waves are called *breakers*, or *surf*. Australians love to swim in these breakers. They call it *surfing*. Sometimes, as today, the sea is rough, and the waves are big. But the swimmers do not mind. Indeed, that is how they like it. We see hundreds of swimmers in that tumbling surf. They test their skill against the breakers.

On the beach we see young men and young women called surf lifesavers. They watch the people in the water. Sometimes they see a swimmer who may be drowning. Then a surf lifesaver on the beach puts on a cork belt and dashes into the surf. He swims as fast as he can to save the drowning person.

As he swims, he pulls a long, thin rope behind him. One end of the rope is tied to the belt that he wears. The other end is held by the lifesavers on the beach. When he reaches the drowning person, the surf lifesavers on the beach pull on the rope. In this way the lifesaver and the swimmer are safely pulled to shore.

Every year the surf lifesavers save hundreds of people from drowning.

Do you see that big, strong rowboat beyond the breakers? The surf lifesavers in that *surfboat* are also there to help the swimmers. They save swimmers who may be drowning. They guard them from another danger also. In the front of the boat a man stands with a



AUSTRALIAN NEWS AND INFORMATION BUREAU

Two surfers ride their boards to shore on a wave.

heavy spear ready in his hand. His eyes watch the tossing waves. He is watching for sharks!

Yes, there are sharks off these beaches. More than three hundred people in Australia have been hurt by sharks while surfing. The sharks killed most of them.

Sometimes a fin cuts through the top of the water. Below the fin, like a shadow, glides the long, slim body of the sea tiger. The shark is hunting for food. It might grab a man in its jaws and drag him under.

So a watch is kept from the surfboat. Surf lifesavers

also watch from a tower on the beach. High above the surf an airplane circles. The airmen are also watching for sharks.

If a shark is seen, the young men in the shark tower will sound a loud, long siren. It is the same kind of siren that we have on fire trucks. When in America we hear that siren, we think, "a fire!" When Australian surfers hear the siren, they think, "a shark!"

Only yesterday a shark came prowling. The siren screamed, and the surfers hurried to shore. Today the surfboat is out again. Yesterday the men tried to spear the monster, but it got away. It might come back!

But the swimmers do not care—much. Shark or no shark they go into the surf. If the man-eater comes along, someone will see it in time. Then the swimmers will rush back to the beach until the shark has swum away. So we can go into the water without much fear. We might even learn how to ride a wave.

Some of the surfers have wooden boards with them. When a big wave comes, the surfers lie on these boards. Then the wave lifts them up and rushes them in to the shore. Other swimmers ride the surf without a board.

Here comes a wave! It is big and smooth and higher than the rest. Suddenly it breaks! It lifts itself up and crashes down!

The swimmers are ready. They swim up on the wave. Then they lie on its foamy front as it comes racing in. It tosses them, out of breath, upon the beach. They pick themselves up with a laugh.

Would you like to be a surf lifesaver in Australia? Many young Australians go to the beach as often as they can. They become surf lifesavers and help to save

people from drowning and from sharks. They do not get paid for doing that. They do it because it is fun. It is fun to help other people.

Land of Many Sheep

If we go to Australia, we shall see flocks of sheep. We may meet a flock along some country road. Behind them are men on horses. They shout, "Ho, ho!" as they drive the sheep forward.

Australia has more than 100,000,000 sheep. The United States has about 30,000,000. Australia has more sheep than any other country.

A flock of sheep is being driven along a highway by a man on horseback. His dogs are helping him.

AUSTRALIAN NEWS AND INFORMATION BUREAU



Why are so many sheep raised in Australia? It is because Australia has huge plains with good grass, which the sheep can eat. Also the Australian weather is mostly warm and dry, and the winters are not very cold. Sheep grow good wool in warm, dry weather. Australian sheep grow the best wool in the world.

Once every year the sheep are driven to sheds where their wool is cut off. Then the wool is sent to the cities. Some of the wool goes to Australian mills where it is made into cloth. Most of the wool, however, is sold to men from the United States, Great Britain, and other countries. They buy the wool for mills back home. You may have a sweater made of Australian wool.

A Young Nation

Once there were no sheep in Australia. No crops were grown there. No cattle were raised there. There were no cities, no farms, no factories, no houses, and no roads.

Then the white men came.

That was less than two hundred years ago; so Australia is said to be a young nation. It is far younger than Europe, which is sometimes called the Old World. It is younger than America, which is sometimes called the New World. When George Washington was a boy, white people had been living in America for over a hundred years. But no white people had yet gone to live in Australia.

The Australian aborigines of past days would hardly know the Australia of today. Miles of wheat wave in the summer winds. Crops of cane, from which sugar is made, grow tall under the sun. Fruit trees blossom on the hillsides. Many trees in the forests have been cut



This map shows that Australia is almost as large as the United States.

down. Their wood is needed for houses, fences, furniture, and railroad ties.

Cattle feed on ranches as big as our state of Rhode Island. These cattle, raised for meat and leather, run wild like herds of buffalo. Their life is full of danger. In long, dry seasons some of the cattle die of thirst. If thirst does not get them, one day the butcher will.

Australian dairy farms send milk to towns and cities. The dairy farms are in the green country in the south. Like the cities many dairy farms are near the sea. The dairy cows, red and white or black and cream, graze on smooth, green hills. Below, the blue ocean sparkles in the sun. In pleasant homes like these the dairy cows grow fat.

But Australia is not only a farming country. Many Australians work under the ground in mines. From these mines they get gold and silver, copper, and coal. Many Australians work in factories. Others work in noisy mills where steel is made. Ships and railroad lines, engines and machines, bridges, and many other things are made of steel.

Australians make all those things and many more. But they do not make nearly so many things as we do, for there are far fewer people in Australia.

More than 150,000,000 people live in the United States. Only 8,000,000 people live in Australia. Indeed, in all Australia there are only as many people as live in the city of New York.

That seems strange, doesn't it? Australia is almost as big as the United States. (See the map on page 14.) Australia is a young nation. In quite a short time the Australians have done some wonderful things in that fine, sunny country of theirs.

Questions the Map Will Help You Answer

Find Australia on the map on page 35. Which ocean lies to the east of Australia? Which ocean lies to the west?

Learning New Words

When a word is printed like this, *inland*, we say it is printed in *italics*. You will find a number of words in this book printed in italics. The first word in italics is *kangaroo*. Make a list of all the words in italics on pages 1-15. Be sure you know what each word means.

True and False

Three of these sentences are true, and one sentence is false. Write the true sentences on a piece of paper.

1. Australia has more sheep than any other country.
2. Australia is cold and damp.
3. Australia is south of the equator.
4. In Australia the inland plains do not get much rain.

A NATION IS BORN

On the east side of Australia stands the great city of Sydney. It is the largest city in Australia. Many ships go to Sydney from America. At Sydney they sail into calm, blue waters between hills. Thousands of homes stand on those hills. Their red roofs are like flowers among the gray-green trees.

Those calm, blue waters are known as Sydney Harbor. A *harbor* is a place where ships can find shelter from storms. Ships coming into the harbor at Sydney leave the ocean and sail for four miles between the low hills. Then they come to a huge steel bridge across the harbor. Trains, streetcars, busses, and automobiles roar over the bridge. Big ships pass beneath it.

How busy Sydney is! The narrow streets are crowded. Subway trains rattle through tunnels below the city. Ferryboats speed across the blue waters. At night the city is gay with lights and flashing electric signs. And people—there are people everywhere. More than 1,500,000 live in this busy, noisy place.

Yet Sydney is a young city. Indeed, less than two hundred years ago there was no city there at all. No white man had ever seen that place. No ship had ever sailed in those calm waters. No bridge stretched high across the harbor. There were no streets and not a house. For hundreds and thousands of years the harbor lay as if asleep in its cradle of hills.

Only the aborigines knew the place, for they had hunted kangaroos there among the trees. These black hunters knew nothing of lands beyond the seas. They had never seen a white man.

Then in the year 1770 the first ship came to the east coast of Australia. It was a wooden sailing ship with three masts. It did not come into the harbor but sailed north along the coast.

The aborigines hunting in the hills saw the passing ship. They stared in wonder. It was the first ship they

Sydney Harbor from the air. The bridge, made of steel, is the largest single-arch bridge in the world. You can see large dock areas on both sides of the bridge. Notice the wharves used to load and unload ocean-going ships.

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had ever seen. "What is that?" they cried in their own language. "Perhaps it is a giant canoe." They watched the ship until it was out of sight.

The sailing ship had come from England. Its name was the *Endeavour*, and its captain was James Cook. But the black hunters did not know that, nor did they care. The ship did them no harm. It came and went like a dream. Who worries about a dream? The aborigines went on with their hunting.

When the *Endeavour* returned to England, James Cook had a great story to tell. He had discovered a land which no white man had ever seen. It was a warm land, green and beautiful. Fruit could be grown there. Sheep and cattle could be raised there. It was a good place for farms. It was a place where English people might like to live. James Cook called it New South Wales.

People in England did not listen to James Cook. For eighteen years no more ships came to the east coast of Australia.

Then in 1788 the black hunters saw sails and masts again. This time there were eleven ships. They sailed right into what is now known as Sydney Harbor.

The aborigines hid behind trees and watched the ships draw near. The black hunters could see people on the ships. Some animals could be seen also, but those animals were not like kangaroos. Roars and squeals came from the ships. They were sounds such as no kangaroos had ever made.

Noise filled the air. The visitors shouted in some strange language. Sea birds flew around the ships giving loud cries. Parrots screamed in the trees. But in the hills the black hunters moved like shadows. They spoke in

whispers. Who were these visitors? Where did they come from?

The ships sailed on with care in the narrow waters. Sailors climbed the masts and began to fold the sails. The ships moved more slowly now. They were coming to a little bay. Slowly, slowly they sailed, close to the land. The black men crept forward to see better. Look, the ships had stopped! For the first time since the world began, ships had come to rest in the harbor at Sydney.

What the Hunters Saw

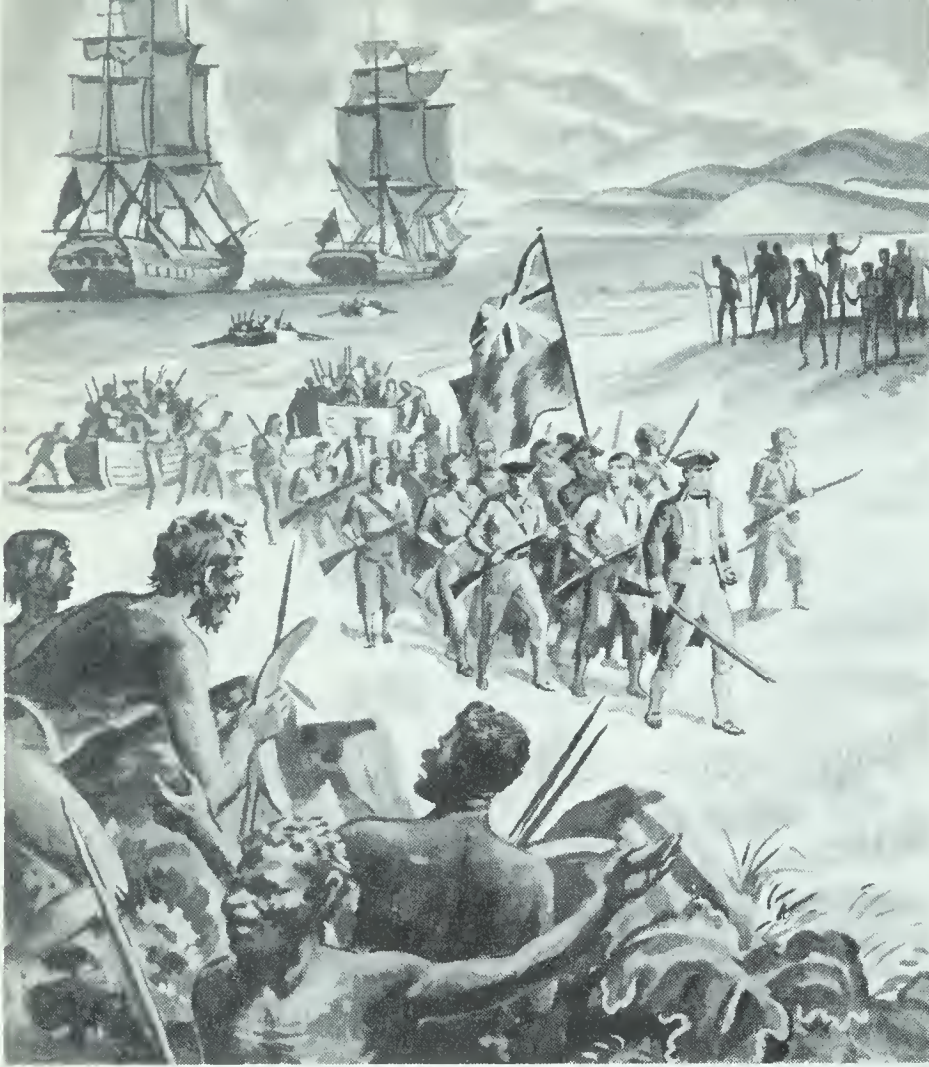
The black hunters were men of peace. They did not get ready to fight the people on the ships. The hunters stayed among the trees, hiding and watching. They saw things stranger to them than any dream.

First of all, men came in small boats from the ships. They were coming to the shore. The black hunters could see them clearly. The sight made the hunters gasp. For the men from the ships had pink hands and faces, and their bodies were covered.

The aborigines did not wear clothes. They lived in a warm place and did not need them. They had never seen men wearing clothes. They had never seen cloth.

More white people came from the ships. Women and children were among them. The strangers walked about on the shore and talked loudly. Some of them shouted. They seemed to be very noisy people. They frightened every kangaroo for miles around. It was clear they knew nothing about hunting.

The aborigines had seen wonderful things, but next day came the biggest surprise of all. A terrible noise broke out on the ships. The roars and squeals were now



MILLARD MCGEE

Captain Cook leads a band of men onto the shore of a new land, Australia.

worse than ever. Then one hunter gasped and pointed. The animals on the ships were being pushed into the water. They were swimming to the shore.

Out of the water, onto the beach, came about sixty animals, wet and frightened! And such animals! Never had the aborigines seen animals like these.

The aborigines did not know what all these animals were, but later the black men knew them to be cows, sheep, and pigs.

In time some of the aborigines came forward and spoke to the white strangers. White men and black men tried to talk together. They did not understand each other's words, but there was no fighting. A smile means "friend" in any language.

When those first ships sailed away, about one thousand white people stayed behind. They lived in tents at first. Then they cut down trees and made small houses.

A village grew, and they named it Sydney. It became the first town in Australia. It was more than that. It was the begininng of a new nation.

Why They Came

Who were those people who began the town of Sydney and thus began a new nation? They were men and women from England. Some of them were soldiers. Others were men and women who had been in English jails. They had been put into jail for breaking some laws. Then they had been sent to Australia.

People who are kept in jail for breaking laws are called *convicts*. Those first white people of Sydney were convicts and soldiers. Sydney began as a kind of prison. The soldiers were there to guard the convicts.

England was sending convicts to Australia because it did not want them at home and it could no longer send them to America.

Yes, England sometimes sent convicts here. That was a long time ago when England owned parts of our country. England called those parts its American *colonies*. A colony is a place where the people do not make their own laws. The people have to obey laws made by men in some other country.

For many years the American people did not make all their own laws. They did not rule themselves. They had to obey laws made by the king of England and his friends. The king and his friends were the rulers of England and the American colonies.

In 1776 the American people became very angry with their English rulers. The Americans did not like the laws which their English rulers made.

“Those laws are not fair,” the American people said. “Besides, we want to make our own laws. We want to rule ourselves. We want to be free.”

So they rose against their English rulers. George Washington and his men fought the English soldiers. The Americans won and became free. England lost its American colonies.

Now England could no longer send convicts to America. The free Americans said, “No. We want no more convicts from England.”

In time the prisons in England became crowded with convicts. The English rulers could not think what to do. Then somebody said, “Well, we cannot send convicts to America. Why not send them to some new place? What about that faraway land which Captain Cook discovered?”

“Yes,” said the English rulers, “let’s send convicts there. It’s 12,000 miles away from England. Nobody will ever get away from that far land. It’s just the place for a prison.”

So convicts were sent to Australia. That is why those eleven ships came sailing into Sydney Harbor. It happened because George Washington and his men won freedom for America.

What Lay Beyond the Mountains

Slowly the town of Sydney grew. It became the capital of the new British colony of New South Wales. The convicts worked hard. They cut down trees and cleared the land for crops. Farms were started. The people had to grow their own food.

At first the convicts and soldiers had a hard time.



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Often the Blue Mountains rise in steep, high cliffs above the low, wooded hills.

Their clothes wore out. Some of their cattle died. Food went bad. Ants and mice ate the seed that was to be used for planting crops. Often the people nearly starved.

They did not give up. More ships came with food and cattle from England. The ships also brought more convicts and soldiers. Land was given to the officers who were leading the soldiers. The officers became farmers, and convicts were sent to work for them.

An officer who had become a farmer discovered that fine sheep could be raised in this new land. The colony began sending wool to the woolen mills in England.

At first all farms were near the sea. Soon most of the good land was in use. There was not enough land near Sydney to provide food for all the sheep and cattle.

Farmers wanted to go inland to find more farming land. But they could not get past the mountains. Those mountains, when seen from Sydney, are a soft blue color. The people of the colony called them the Blue Mountains. What lay beyond? Everybody wondered. Nobody knew. Nobody had yet found the way to the other side.

Men tried to find a way across the Blue Mountains. These men were *explorers*. They were looking for new land. Explorers are brave people who go to places where few men or no men have been before.

It was not easy to find a way through the Blue Mountains. Some explorers tried to walk through the valleys. They did not get far. Sooner or later they reached bush too thick to go through or a cliff too steep to climb.

Others tried to walk along the tops of the mountains. Those tops, called *ridges*, were as steep as walls. Sooner or later the explorers would come to the end of a ridge. It would end in a cliff too steep to climb down.

The explorers said that even the crows seemed to lose their way in this country. One man said it was like trying to travel over the tops of houses in a town.

Again and again men tried to cross the mountains. At last, after twenty years, three explorers found the way. These men tried a new way along the ridges. Once they thought they were beaten. They were going along a narrow ridge with a deep valley on each side. Suddenly they came to a high heap of rocks which stood in the way.

The explorers sighed. They turned to go back. Then one of them cried "Wait!" He found that they could roll aside some of the rocks. A small gap was made and the explorers just squeezed through.

Beyond the mountains lay a thrilling sight. Here were wide plains rich with grass. It was just the kind of land the farmers wanted.

Back in Sydney the news spread like fire. Everyone was talking about the plains beyond the mountains. On these plains, people said, a farmer would become rich. But farmers would need a road wide enough for their wagons and sheep and cattle.

Convicts built the road. "This will be dangerous work," they were told, "but you will be free when it is finished. You will be convicts no longer."

How those convicts worked! They cut the road through thick bush and along the mountainsides. For 130 miles the road crossed mountains, valleys, and streams. At last it dropped on to the rich plains beyond. In six months the road was finished. Soon the first flocks and herds were spreading over the inland plains of Australia.

Free Men Arrive

The crossing of the Blue Mountains was a great step forward. It was as if a gate had been opened into some huge park. But instead of a park a huge country lay ready for settlers.

Land! Plenty of land! The news spread to England. "Have you heard about New South Wales?" people in England asked. "Have you heard about those wonderful grassy plains?" They began to stop thinking about



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INFORMATION BUREAU

The owner of this farm has had to clear his land of trees. The clearing is still going on.

Australia as a prison. Many people who were not convicts began going to Australia. Most of them wanted farms. Land was easy to get in New South Wales, so they went to Australia to be farmers. These people were called free *settlers*.

More and more settlers hurried to Australia. They were like the men and women who came to America in our early days. They set out for a land which promised a better life. They wanted to work for themselves instead of working for other men.

Across the Blue Mountains the settlers pushed. They were the same kind of people who went across America in covered wagons. The Australian settlers also used wagons pulled by teams of oxen. Piled high on those wagons were babies and kittens, parrots and puppies, and food and blankets. A driver walked beside each team of oxen. His long whip had a handle longer than he was tall.

Now and then the wagons stopped. The women cooked a light meal by the side of the road. Sometimes the settlers camped by cold mountain streams. The children waded in the water and looked for small fish. The

older people talked. They spoke of homes they would build on the plains. All this was very different from the way they had lived in England.

No More Convicts

The convicts had to work in Australia, and the work they did was good. Convicts made the first roads. They built the first homes. They gathered the first crops. Convicts drew plans for fine buildings which still stand. Many convicts who worked well were given their freedom in Australia.

Some of the convicts sent to Australia were good men. Hundreds of Irishmen were among them. Ireland used to be a colony of England. Irishmen had risen against the English king, just as Americans had done. Many Irishmen had fought for their freedom as George Washington did. But they lost their fight and were sent to Australia as convicts.

That does not happen now. The laws of England have been changed. The laws today are much fairer than the laws of those hard times.

Yes, there were good people among the convicts. Yet many were bad people. Some had killed other men. Some lived by stealing. When some convicts came to Australia, they fled into the bush and became robbers. They got guns and rode about on horses.

After sixty years there were more than 100,000 free people in Australia. These people did not want any more convicts from England. They said so, often and loudly. When more convicts arrived, many Australians got very angry. They were ready to fight to keep more convicts from coming to Australia.



AUSTRALIAN NEWS AND INFORMATION BUREAU

Near the east coast of Australia, gum trees grow tall above ferns and thick grass.

In England also there were good people who spoke up about this. They did not like convicts being sent away from their own country. They said that it was not fair. So after a time no more convicts were sent to Australia.

From Colonies to Free Nation

New South Wales was the first colony in Australia. Soon several others were begun in different parts of the country. One colony was begun on an island farther south. This island is Tasmania. You can find it on the map on page 30. Colonies were begun in the far west. The names of Albany, Perth, and other towns appeared on the maps. A colony was begun on the northeast coast at Brisbane. Colonies were also begun on the southern coast at Melbourne and Adelaide. "This will be the place for a village," said an early settler beside the River Yarra. Today that village of Melbourne is a city almost as big as Sydney.

All those colonies were begun by British people. That is why Australia is a British country today.

Through the years many thousands of free settlers have gone to Australia. Today the convicts are almost forgotten. Australians of today are as free as Americans are.

In the year 1901 a fine thing happened. All the colonies in Australia joined together to make one nation. The name of this nation is the Commonwealth of Australia. A *commonwealth* is a nation or state where the people join together for the good of all.

Something like that happened years before in our own country. First, colonies were begun in Virginia, Massachusetts, New York, and other places. Later the American colonies joined together to make the United States of America.

In Australia the colonies became states of the Commonwealth. As in America, each state has its own capital. The six Australian states and their capitals are:



AUSTRALIA

Cities

- SYDNEY..... Over 1,000,000
- Brisbane..... 100,000 to 1,000,000
- Darwin..... Under 100,000
- ☆ Capital

0 Scale of Miles 442

One inch stands for 442 miles

| <i>State</i> | <i>Capital</i> |
|-------------------|----------------|
| New South Wales | Sydney |
| Victoria | Melbourne |
| Queensland | Brisbane |
| South Australia | Adelaide |
| Western Australia | Perth |
| Tasmania | Hobart |

It is easy to find these states and capitals on the map on page 30. Tasmania is a state even though it is an island by itself.

However, a large part of Australia is not yet a state. The Northern Territory is not a state, because so few people live there. A *territory* is a space of land. It can be big or small. Sometimes a territory is like a state which does not yet make its own laws. It is like a state which has not yet grown up.

The Northern Territory is twice as big as Texas, which is our largest state. The Northern Territory has only about 13,000 people. Darwin, on the far north coast, is the capital of the territory. Less than 3,000 people live in Darwin.

In the United States we have a capital for the whole nation. Our national capital is Washington. Australia also has a capital for the whole nation. The capital of Australia is Canberra. In Washington laws are made for all Americans. In Canberra laws are made for all Australians. The Americans do not have to obey laws made in a foreign country. Nor do the Australians.

Australia is a free country. It is not a colony but a grown-up country. The Australian people rule themselves.

Questions to Answer

1. What animals did the settlers take to Australia?
2. Why did James Cook like the east coast of Australia?
3. How many States are there in Australia? Which one is an island?
4. What is the capital city of Australia?

Sentences to Finish

Copy down this little story. Fill in the blank spaces from the words below. (*Do not write in this book.*)

The first white people to live in Australia were _____. They were sent to Australia from _____ and were guarded by _____. Later a new kind of people arrived in Australia. They were free _____ who wanted to make farms in a new country. New South Wales was the first _____ in Australia, but soon several others were begun. In time these became _____ in a free nation called the Commonwealth of Australia.

| | | |
|----------|---------------|----------|
| states | settlers | soldiers |
| convicts | Great Britain | colony |

Things to Do

The first white people came to live in Australia in 1788. See if you can find in a history book the names of two important Americans who were alive at that time.

Draw a map of Australia showing the states and the Northern Territory. Do not forget Tasmania. Put in the State capitals and the national capital, Canberra.

Useful Facts

Something added to the end of a book is usually called the *Appendix*. This book has an Appendix beginning on page 300. In the Appendix you can find a number of useful facts. For example, you can find the length of the longest river in Australia.

THE LAND THE EXPLORERS FOUND

We Americans are lucky. Our country has many neighbors. It is easy for us to visit them. We can go to Canada without even getting out of a motorbus. It is just as simple to go to Mexico. Canada and Mexico are our next-door neighbors.

Australia has sea all around it. It has no next-door neighbor. If Australians want to visit any other country, they must go across the ocean.

If you look at the map on page 35 you will see several lands rather near Australia. All those lands were discovered by brave explorers. Some were discovered before Australia was.

Australia's nearest neighbor is New Guinea. It is less than ninety miles from Cape York, the northern tip of Australia. The sea passage between Australia and New Guinea is Torres Strait. A *strait* is a narrow part of the ocean between two larger parts.

People with dark skins live in New Guinea. These people do not rule themselves. Australia rules the eastern half of New Guinea. But the people of New Guinea live in a different way from the Australian people.

One of Australia's neighbors is beautiful New Zealand. It is not a near neighbor of Australia. It is 1,200 miles away across the stormy Tasman Sea. The distance from Australia to New Zealand is as great as from Canada to Mexico. We shall read of New Zealand later in this book.

Australians have no neighbors to the south or west. Only the ocean lies beyond Tasmania, the most southern part of Australia. To the west is the Indian Ocean.

So, you see, Australians live a long way from most other peoples of the world. Many Australians are sorry about that. They are very interested in what we do in America. They also like to know what people are doing in Europe and Asia and Africa. They wish they could drop in and talk to us sometime. It is nice to have neighbor countries that you can visit easily.

How Australia Got Its Name

When the first white people went to Australia, they knew almost nothing about the country. They did not know how big it was. They did not know its shape. They knew nothing about its mountains, its rivers, or its plains. All these things had to be discovered. Here was work for brave men, for explorers.

Matthew Flinders was an explorer. He was the first man to sail around the coast of Australia. He made a map as he sailed along. From this map people could see how big Australia was. They could also see its shape.

At one time some people thought that Australia was made up of many islands. Flinders showed that most of Australia was one very large island. Australia is a *continent*, which is a very large piece of land. There are six other continents in the world. They are Asia, Africa, North America, South America, Europe, and Antarctica. Australia is the largest island and the smallest continent.

Flinders gave the continent its name. *Australia* means "the south land." Flinders liked the sound of the word, Australia. It had music in it. It would be a good name



for that big new country. Other people thought so too, so the name Australia was chosen. Do you hear music in the word?

All Were Brave

Flinders was an English sailor. Most of the early land explorers also came from England. They were used to a small, tidy country with soft green fields.

The Australian bush was different. It was strange to them. Australia seemed to be a wide, brown land. The grass was not green except after a rain. The trees seemed very tall. Queer noises were heard in the woods—the whispering of insects, the thump-thump-thump of a jumping kangaroo, the sudden wild laugh of a kookaburra.

Were there dangers in the bush? The explorers did not know, but that did not stop them. They took guns and axes, beads, and other presents for the aborigines. They said goodbye to their loved ones. Then they set forth into the inland spaces where no white man had ever been.

Some explorers came back with exciting news. They had discovered beautiful pastures. They had come upon fresh streams. They had seen woods like parks, and plains like carpets of green and gold.

Some explorers who went far inland came back like beaten men. “We found deserts,” they said. “The heat was terrible. The screws dropped out of our boxes. The lead dropped out of our pencils. The ink dried on our pens before we could write a word. The stony ground burned like an oven. It even burned the skin off the feet of our dogs.”

Many men did not come home at all. Some died of thirst. A few were speared by aborigines. Others lost their way and were never seen again. Their bones rest where they fell.

Why did men go exploring? Some explorers hoped to be famous. Some hoped to find gold or valuable jewels. Some were hunters seeking animals for their fur. Many were settlers seeking new pastures. All were brave.



AUSTRALIAN NEWS AND INFORMATION BUREAU

This river bed is now dry, but during the rainy season it may carry water to the Murray River.

Australia seemed to call many brave men. To the explorers it seemed to say, "Come and find my secrets."

The Riddle of the Rivers

There are many rivers in the eastern part of Australia. They begin in the Blue Mountains or in other mountains near the coast. Most of them flow east into the Pacific Ocean. Short and swift, they rush from the mountains to the sea.

The settlers who crossed the Blue Mountains found different rivers. They were different because they flowed toward the west. They flowed inland. They flowed

across wide plains and were lost to sight in the distance.

How far did they flow? Did they pour into some huge inland sea? Here was a riddle. Explorers said they would seek the answer.

✓ John Oxley, a young explorer, followed one river for hundreds of miles. It did not lead to any inland sea. It twisted here and there across the plains. It flowed more and more slowly. Sometimes it seemed to stop among pools of water in which bushes grew. In the end it died away in a patch of damp sand.

The other rivers, it seemed, were much the same. Some flowed a long way across the plains. Others did not flow so far. All dried up sooner or later. They died away in the sand.

In a long, dry summer the rivers were a sad sight. First, they dried up into separate pools of water. Then many of the pools dried up. The explorers found miles of dry, sandy river beds. Some inland rivers did not flow for months.

“Rivers without water!” the settlers said. “What a strange country!”

Then came a good year. Heavy rains fell. Water poured into the river beds. Dry rivers seemed to come to life. They began to flow again. Soon they were flowing far across the plains. Where did they flow?

At last some explorers found the answer to the riddle. There was no inland sea. The rivers, after heavy rains, joined one big river in the south. This river is the Murray, which flows into the ocean.

If you turn to the map on page 30, you will see where the Murray flows. Today it is the border between Victoria and New South Wales for over a thousand miles.

The Murray flows all the year round. It is Australia's greatest river. It has been called the Mississippi of Australia, but it is not so long as the Mississippi.

Many rivers join the Murray in wet seasons. The largest of these rivers is the Darling, which has been called the Missouri River of Australia.

The Murrumbidgee is another large river which joins the Murray. Like the Darling it dies away in a long summer.

Explorers who went farther inland discovered more rivers. After heavy rains these rivers are one thousand miles long. During floods they sometimes spread out to eighty miles wide.

It does not often rain in the far inland. Most of the time these rivers are as dry as a city sidewalk on a summer day.

When the explorers were away on their journeys, they made maps of the land. Each explorer made a map of what he had seen. One by one those maps were put together until almost all of Australia was known. If you look at the map on page 30, you will see what the explorers discovered about Australia's rivers. The rivers shown by dotted lines do not flow the year round.

Dry Lakes and Hidden Lakes

The explorers discovered lakes even stranger to them than the rivers. If you look at a map of Australia, you may see many lakes. If the map is done in colors, the lakes may be blue like the sea. That is the way that lakes are shown on maps of every country.

These Australian lakes are not like the lakes we know. They are not full of cool, fresh water. Most of the time



AUSTRALIAN NEWS AND INFORMATION BUREAU

The entrance to one of the Nullabor Caves.

they have no water in them at all. They are lakes which have dried up. The beds of these lakes are dry sand or white sheets of salt.

Lake Torrens is a large lake in the southern part of Australia. The first explorer to stand on its shore looked over a huge sheet of salt. It stretched white and shining as far as his eyes could see. Salt covered the lake like ice. He walked out toward the middle of the lake. He found that the lake was full of mud, with salt above it like a crust.

That explorer was Edward John Eyre. A lake north of

Lake Torrens is named for him. Lake Eyre is the largest lake in Australia. It is also a dry salt lake. Lake Eyre has water in it only after heavy falls of rain.

The map on page 30 shows large rivers leading into Lake Eyre. But only once in every few years does Lake Eyre get water from those rivers. The water in the lake may then be one inch deep.

Not all lakes in Australia are dry and salty. Australia has a number of lakes with fresh water in them. But they are too small to be shown on most maps of the continent.

A few small salt lakes are deep. Some of them are fun to swim in because human beings do not sink in very salty water.

There are lakes of still another kind in Australia.

Paths and railings protect visitors in the Nullabor Caves.

AUSTRALIAN NEWS AND INFORMATION BUREAU



These lakes, perhaps the strangest of all, are found on the Nullabor Plain. This plain is near the southern coast of Australia. You can see it on the map on page 30. The word *Nullabor* means "no tree." Not a tree can be seen for hundreds of miles. The plain is as flat and dry as a huge red floor. Yet it has many lakes. You could walk right over those lakes without knowing it, for they are in great caves under the ground!

The lakes are not large. Many of them are joined by *waterways*, which are water passages along which boats can travel. Nobody yet knows how far these lakes and waterways stretch under the Nullabor Plain.

They Remember a Hero

The explorers discovered wide plains but few mountains in Australia. The mountains were not very high. They were not so high as many mountains in our country.

Millions of years ago the mountains of Australia were perhaps twice as high as they are today. But they have been worn down by wind and rain. Today they are only the stumps of old mountains.

The Blue Mountains were the first to be discovered. Explorers later came upon more mountains to the north and to the south. It was found that all those mountains were part of a long, broad band of highlands. This band of hills and mountains stretches all the way along the east coast of Australia. You can see these Eastern Highlands on the map on page 30.

The Blue Mountains are a part of the Eastern Highlands. So are the Australian Alps, which lie some distance south of the Blue Mountains. The Australian

Alps are the highest row of mountains in Australia. A row of mountains is called a mountain *range*.

There are other mountain ranges in Australia. But most of the country is made up of plains and deserts. Australia is a flat continent.

Not all of the plains are the same height above the level of the sea. The western half of Australia is mostly a high plain called a *plateau*. It is about one thousand feet above sea level.

Low plains stretch between this plateau in the west and the highlands in the east. More low plains are found around the coasts. A plain along a coast is a *coastal plain*.

The highest mountain in Australia is in the Australian Alps. This mountain, whose top is 7,328 feet above sea level, has a fine name. It was given this name by the explorer who discovered it.

In 1776 a young man came to see George Washington. It was soon after the Americans had begun to fight the armies of the king of England.

That young man was Thaddeus Kosciusko. He was not an American. He was a Pole. He had come all the way from Poland where he was born. Poland is a country in Europe.

Kosciusko was a soldier. He was only twenty years of age, but he was good at building forts. He had learned about forts in Europe.

George Washington was pleased to have the help of this young soldier from Poland. So Kosciusko joined the American soldiers. He showed them how to build strong forts. He helped them to build bridges. He worked hard for freedom.



AUSTRALIAN NEWS AND INFORMATION BUREAU

This farmer is pumping irrigation water to his fields a half-mile away.

Kosciusko did not stay in America. He went back to Europe and fought for the freedom of his own country. When he died, he was buried in a town in Poland. The people of the town built a huge mound of earth near his grave. "When others see this mound," they said, "they will remember Kosciusko."

What has all that to do with a mountain in Australia? Well, a few years later an explorer was making his way through the Australian bush. This explorer was a Pole. He traveled through some of the mountains in the south. He named the highest mountain for the hero of his country.

Kosciusko himself never went to Australia. Yet Australians know of him as a man who fought for freedom.

A Dry Continent

Rain may sometimes spoil our fun, but in dry countries rain is important. Rain water spills into creeks and makes them flow. Rain fills ponds and lakes. Rain brings water to thirsty crops.

Not much rain falls in the Australian inland. And so—

The rivers stop flowing;
The lakes dry up;
Few crops are grown; and
Few people live there.

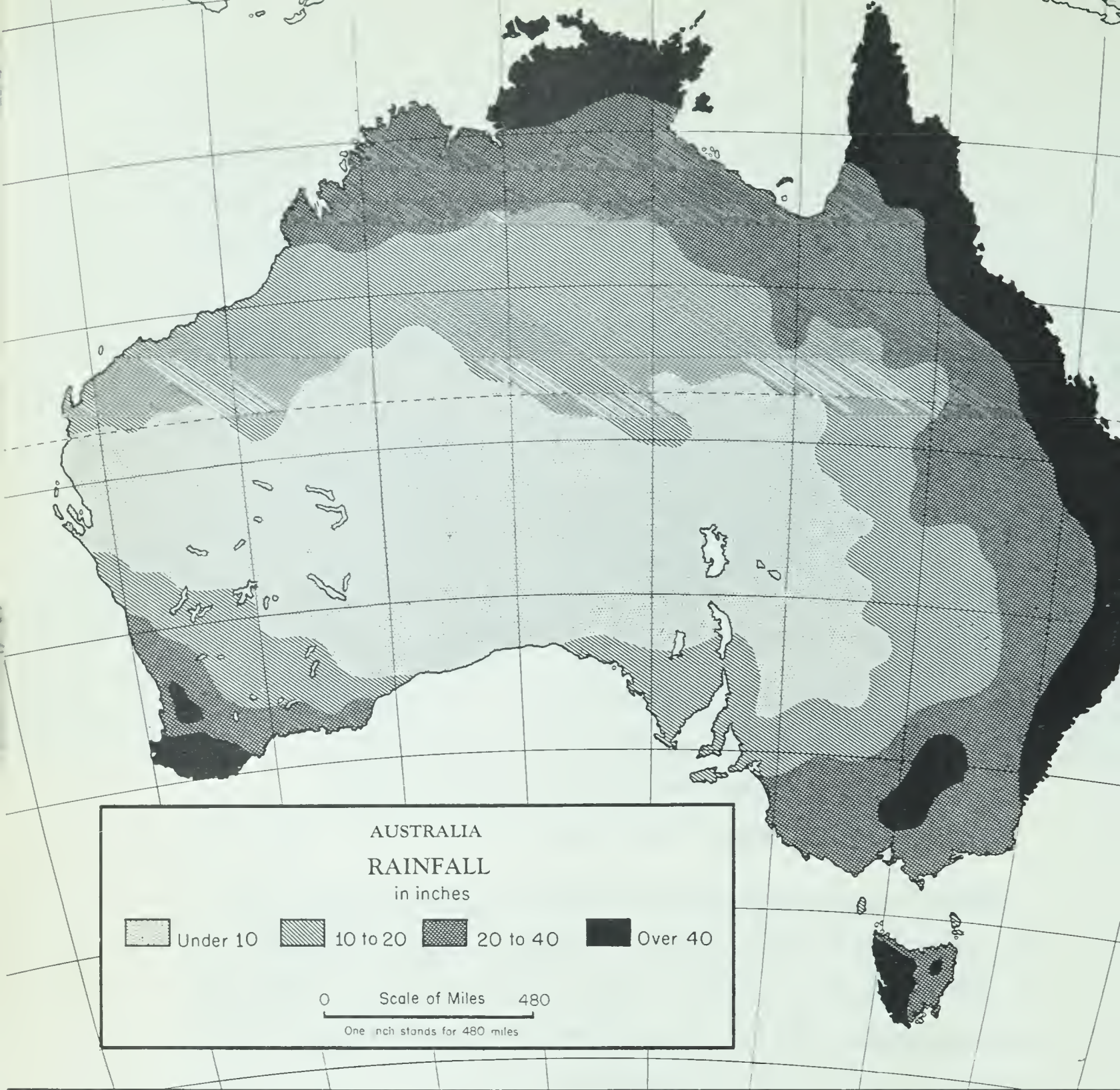
How different it is near the east coast! Here wide spaces of land get good rains. And so—

The rivers always flow;
Many crops are grown;
Many farms need many hands; and
Many people live there.

Rain is measured in inches. We say, for example, that New York City gets about forty-three inches of rain in a year. Sydney, Australia gets about forty-six inches of rain in a year. Every year all of the Australian capital cities get over twenty inches of rain.

All the rain which falls in one place in a certain time is called its *rainfall*. The rainfall map on page 46 shows the wet and the dry parts of Australia. You will see that most of Australia gets less than twenty inches of rain in a year. That is why Australia is said to be a dry continent.

However, some places in Australia get plenty of rain. The western side of Tasmania gets up to 144 inches of rainfall a year. So the hills there are covered with very



thick, damp forests. To this day explorers have not been able to go through parts of Tasmania.

Thick forests are also found around Deeral, Queensland. That little town is the wettest place in Australia. Deeral has about 186 inches of rainfall a year. In 1939 it had 257 inches. Deeral has a greater rainfall than any place in the United States.

Rain at Deeral does not help the huge dry spaces in

the inland. Their problem is lack of rain. Many Australians would rather have more rain for their country than anything else in the world.

Thirst, the Enemy

Thirst was the great enemy of the men who explored Australia. Some explorers died because they could not find water in the deserts. Some came back safely because they had found water in small pools.

Some pools get their water from little springs. Sometimes rain leaves a pool among some rocks. Often, as a river dries up, pools are left along its bed. To Australians in the dry country all pools are important. Australians call them *water holes*.

The inland rivers dry up quickly because they flood over wide, sandy plains. Some of their water sinks into the ground. The rivers also dry up quickly because the hot sun lifts some of their water into the air.

Australia, on the whole, is a hot continent. It is hot because it is near the equator. All places near the equator are hot, except on mountaintops and seacoasts. Australia is hotter than the United States because it is nearer the equator.

Damp, hilly Tasmania is the coolest state in Australia. It is farthest from the equator and every part of it is near the ocean.

In southern Australia the winters are cool, but ice does not form on the rivers, except in some mountains. In no Australian city can children go skating on a pond.

In northern Australia even the winters are warm. A child could grow up there without ever feeling a really cold day.



This map shows the Great Australian Bight and Eyre's route, which you will read about in the next chapter.

The Australian summers are hot. In the north they are very hot. Marble Bar, in northwest Australia, is said to be the hottest town in Australia. You will find Marble Bar on the map on page 30.

The *temperature* of a place tells you how hot it is. Temperature is measured in *degrees*. If the temperature is over eighty degrees, we can say that the weather is hot. It would certainly be hot in New York. Yet eighty degrees would be looked upon as a cool change during the summer at Marble Bar.

The temperature at Marble Bar is often above 110 degrees. It does not even get cool at night. Marble Bar can be very hot for weeks at a time. In one year the temperature did not once fall below 100 degrees for 160 days and nights. Think of that! Over 100 degrees for five months without a break!

Not many people live at Marble Bar. They go there only because gold and other valuable minerals are dug out of the mines there.

Exciting Tales

Australia is a big country, so it did not give up its secrets easily. Explorers took nearly a hundred years to discover them. Many an exciting tale can be told about different explorers and about the places that they visited.

One of these places was the Great Australian Bight. A *bight* is a long curve. The Great Australian Bight is a long, wide bay that lies along the southern coast of Australia. The next chapter is about some young explorers and what happened to them on the shores of the Great Australian Bight.

Sentences to Finish

Choose the correct ending for the sentences below.

1. Australian rivers dry up in summer because
 - (a) they do not flow fast.
 - (b) they flow through flat country.
 - (c) they do not get much rain water.
2. Australian mountains are not high because
 - (d) they are in a warm country.
 - (e) they lie south of the equator.
 - (f) they have been worn down by wind and rain.

Learning Something New About Words

Every word has one syllable or more. For example, jump has one syllable. Carpet has two (car and pet). Newspaper has three (news pa per). Write these words down and divide them into syllables:

| | | | |
|---------|-----------|-----------|-----------|
| inland | breakers | Nullabor | plateau |
| equator | Australia | explorers | kangaroos |

Look up each word in the glossary at the end of the book to see if you are right.

A BRAVE EXPLORER

Edward John Eyre was a brave young explorer. He loved to be the first white man to go into wild parts of Australia.

One day in the year 1841 Eyre had his camp on a sea-shore. It was a quiet coast, a long distance from any town. Eyre was about to set off on a journey. It would be a long journey and full of danger.

Today Eyre was thinking hard. He held in his hand a letter from a friend in Adelaide. The friend begged Eyre not to make the journey. His letter said, "Don't go!"

Eyre read the letter with care. Then he read letters from some other friends. All the letters had been brought to Eyre's camp by a little sailing ship called the *Hero*. The sailing ship was now waiting in Fowler's Bay near by.

"Come back," said the other letters. "Come back in the *Hero*. Please do not try to walk to Albany."

Eyre had left Adelaide some months before. He had crossed a terrible desert north of Adelaide. Then he had made his way to this spot, Fowler's Bay, on the Great Australian Bight. From here he had planned to walk to Albany.

Albany is a pleasant little town in Western Australia. It is a thousand miles to the west along the Great Australian Bight. Eyre had visited the town by sea. His ship

had taken him into a fine harbor. The homes in Albany lay at the foot of steep hills.

Eyre wanted to go to Albany. He wanted to find a way along which cattle might be driven around the bight. In this he was to fail, but he had another reason for going. The young explorer had a strong wish. He wanted to be the first white man to cross the continent.

Eyre thought of the comfort and safety of Adelaide, which he had left so many weeks ago, and asked himself, "Why should I risk my life?" Then he took out a map of the south coast of Australia. It was the map which Matthew Flinders had first made. Eyre found Fowler's Bay. Then he looked at the name of Albany, far to the west. Can you find those places on the map on page 48?

As he looked at the map, he thought: "No white man has yet walked across the continent. You, Eyre, will be the first!"

"Be safe," said the letters.

"Be the first," the map seemed to say.

Eyre lit his pipe. He walked to a low hill near by. He climbed the hill and stared along the coast. It looked hot and thirsty. In the bay below, the *Hero* waited. It waited for him.

Next day the little ship left Fowler's Bay for Adelaide. Edward Eyre was not on it. Instead it carried letters to his friends. The date on the letters was February 24, 1841. "I will go on," Eyre wrote. To himself he said, "I will reach Albany or die."

As Eyre waved goodbye to the *Hero*, four men stood beside him. One was a white man with a black beard. The others were aborigines. They were young aborigines, hardly more than boys.

The white man's name was John Baxter. He worked for Eyre. He knew the bush very well. He knew that great danger lay ahead in this walk to Albany.

"Go back to Adelaide," Eyre had told him. "Go back on the *Hero*." But Baxter had said, "No." He would not leave Eyre.

"I'll go with you," Baxter said. "I will stay with you to the end."

Thirst

Early next morning the five men set out from Fowler's Bay. They were beginning their thousand-mile walk to Albany.

Wylie, the oldest of the three aborigines, led a line of horses, which walked one behind the other. The horses carried heavy packs, which held flour, sugar, tea, and medicines. The horses also carried spades and buckets, guns, and water. The water was in small wooden barrels called *kegs*. Wylie's dark eyes shone with joy as the journey began, for his people lived near Albany. He was going home.

Joey and Yarry, the other aborigines, were also busy. They were driving six sheep, which were being taken along as food. The explorers would kill a sheep when they needed meat.

Eyre and Baxter led the way. They talked and laughed as they walked the first few miles. Soon the rising sun became hot. There was no sound but the steady tramp of hoofs and the squeak of packsaddles. Hour after hour the men would hear these sounds. For weeks they would hear them. As long as they lived, they would remember them.



AUSTRALIAN GEOGRAPHICAL SOCIETY

The cliffs along the Great Australian Bight are high and steep. Notice the flat desert land above them.

Day after day they marched among low sand hills. When the sun became too hot, they found shade under small trees. Then they walked on later under the pale light of the stars.

The sand hills gave way to a line of cliffs along the coast. They rose straight from the sea. Eyre and his men walked along the top of the cliffs with the desert on their right.

As the explorers pushed on, they looked for water holes. The water in the kegs would not last long. It was for the men. Often the horses and sheep had to go without.

Water was found in hollows among the sand hills. The water was under the ground, and the explorers had to dig for it. That was why they had brought spades and buckets with them. When they found water, they rested for a day or two beside it. Then they filled their kegs and went on, hoping to find more water along the way.

There were many miles between water holes. Often men and beasts were hungry. Often they were thirsty. Once the horses and sheep went for five days without water. The animals also found little food for most of that time. The poor beasts could hardly walk. They wanted to rest, but without water that meant death. So the explorers drove them on.

Sometimes the men rode the horses. That was when the horses were strong and did not have too much to carry. Most of the time the men walked. At first the horses carried warm clothing for Eyre and Baxter, for the nights were cold and getting colder. Later the explorers threw this clothing away. They did this to make the loads lighter for the horses.

It was cold at night, but the days were blazing hot. The sun beat down on the explorers. Clouds of sand choked and blinded them. Swarms of flies worried them with stings like hot needles.

“The Horses Cannot Last”

Many days passed. The explorers were on another long push between water holes. Men and horses were tired and weak. They could hardly walk. One of the horses fell and could not get up again. It lay on its side with its tongue out.

Eyre and the three aborigines waited while Baxter got

his gun. By and by they heard a shot. Then Baxter joined them. Angry, he strapped the gun back on a packsaddle.

"That's the third horse I've had to shoot," he said. "The others can't last. They have been five days now without water. We'll never reach Albany. We ought to go back to Fowler's Bay."

Three black faces turned first to Baxter and then to Eyre. The young aborigines looked frightened.

"Stop that silly talk, Baxter," Eyre said in a stern voice. "We'll find water if we push on."

Sure enough they found water the next morning. Again the party rested. They had to rest until the horses got their strength back. The last sheep had been eaten days before.

The horses had lost their strength. And something else had gone also. The aborigines had lost their courage. They seemed different. They were not helping with the work as they had done. As Eyre gave each man his share of food, the Aborigines took it without speaking.

While they were at this spot, Eyre shot a small kangaroo. It was soon eaten. One of the aborigines speared a big fish in the sea. The explorers ate it, but it made Eyre sick.

Eyre was not a man to think about himself. He looked each day at the remaining horses. The rest was doing them good. In time they lifted their heads again. Their bones did not stick out so sharply. Their steps were firm. They were almost ready to go on.

But one horse would not eat. One day it lay down and would not get up. Eyre knew it would never get better. He thought of the long miles that lay behind them and the long miles ahead. How bravely that poor horse had



AUSTRALIAN NEWS AND INFORMATION BUREAU

East of the desert is Adelaide, the city from which Eyre began his trip to Albany.

worked! “But we’ll have to shoot it, Baxter,” said Eyre sadly. “And we need its meat.”

The horse was shot. Some of the horse meat was hung in the sun to dry. It was hung on a string between two small trees. It was left hanging there also at night.

Fear

One night the aboriginal boys stole some of this meat. They did that because they had grown afraid of the desert. They had seen that Baxter was afraid. So now they believed that they might die of hunger and thirst.

Eyre saw next morning that some of the meat had been taken. He guessed that the aborigines had taken it.

"It's not fair to steal food," he told them. "It is true that we don't have much. But if anyone has more than his share, the others must have less. What would you think if I stole your share of food?"

Yarry frowned. "Wylie and I will leave you," he said suddenly. "We'll go on by ourselves."

"You can't go on alone," said Eyre quietly. "None of us can. We'll get to Albany only if we help each other."

The aborigines shook their heads and looked at their toes. Yarry kicked crossly at the sand.

"Very well then," said Eyre, "I've warned you. You'll find no food in the desert. If you don't want to stay with us—go."

Wylie and the angry Yarry went. Four days later they came back. They were hungry. "I'm sorry we took that meat," Wylie said unhappily.

"All right, boys," Eyre said. "You stay with us and play fair. You'll get your share of food just as before."

Wylie smiled. He was glad to be back. His angry friend said nothing. A few nights later a terrible thing happened.

A Shot in the Dark

It happened at a place halfway to Albany. The explorers had made their camp for the night. They made it behind some rocks, which gave shelter from the cold night wind.

The men settled down as usual. They lit a fire and cooked a meal. Eyre was pleased that they were now halfway to Albany. Perhaps the worst part of the journey was over. He did not guess that the worst part was to come this very night.

Baxter and the aborigines lay down to sleep. Eyre looked over the packs. Yes, there was still enough flour left. Some sugar also remained. They were well packed away. So, it seemed, were the guns.

Eyre took the first watch over the horses. There were only five horses now. Eyre was worried about them. It was three days since they last had a drink. He walked over to them about a hundred yards away. They were looking for grass to eat. Eyre sat down beside a rock and watched some clouds pass before the moon.

He began to think about the aborigines. He hoped they would not run away again. He was worried about them. They were afraid, and it was because Baxter was afraid. Eyre did not blame Baxter. It could happen to anyone. But Baxter had shown his fear. He had let the aborigines see it. That was a mistake. If a man is afraid, he should not let people know it. Yet Baxter was a good fellow. How lonely it would be in the desert if anything happened to Baxter!

Eyre shivered in his thin cotton clothes. He would like to get warm by the campfire. Should he go back and put more wood on it? No, he must not leave the horses.

Eyre thought about his journey. Would the people of Australia remember him? Would Australian boys and girls some day read of Eyre, the first white man to cross the desert from east to west? Instead, perhaps they would read: "Edward John Eyre set out for Albany in 1841. Eyre and his men were never heard of again."

Eyre could not stop a shiver. "Don't be a fool," he told himself, "we'll get through. In a few more weeks we'll see the roofs of Albany."

He was cold and again he thought of the campfire. He

looked back through the darkness toward the camp. Then it happened! He saw a distant flash. A gun sounded sharp and wicked in the night.

"Baxter!" Eyre called. But the only sound was the wind howling like a wolf.

Straight for the camp Eyre ran. He saw Wylie running toward him in terror. "Oh dear, oh dear!" Wylie cried. He was too frightened to say more.

As Eyre stumbled into the camp, the moon came out from behind a cloud. There in the moonlight Baxter lay. Eyre bent over his friend.

"Baxter!" he sobbed. But Baxter was dying.

Baxter dead! For a long moment Eyre could not believe it. At last Eyre stood up and looked about him. Around the camp the packs lay scattered. Yarry and Joey were gone. They had shot Baxter, taken food and guns, and fled!

Eyre felt weak and alone. True, Wylie was with him. But they were five hundred miles from friendly people. They were in one of the wildest parts of Australia. Nobody could help them. What was the use of fighting the desert now?

Then Eyre's courage came back. Had Joey and Yarry left a gun? Yes, they had left three guns and a few bullets. And look! Here was some flour they had missed in the dark.

Quick! The horses! He had left them wandering. He and Wylie would die if the horses got away. They hurried back and found the horses.

As the sun climbed up the morning sky, it shone on the backs of two lonely men. Eyre and Wylie were heading west with their horses—ever west, on to Albany.

Victory

For days and weeks they pushed on. One day they saw a sailing ship near the shore. The ship had come to these waters to hunt whales.

The captain of the ship was kind to Eyre and Wylie. He gave them food, water, and new clothes. He took them on the ship and made them rest for days. They felt like giants when they set off again.

Day by day, as they walked west, they found more water and more grass. Then they came to some tall trees. The desert lay behind them.

Now they had no fear of thirst. They were in a part of Australia where rain fell often. Indeed they were sometimes wet to the skin as they walked through heavy rain. They were glad to be out of the desert. They hated it. They wanted to forget it. They did not speak of Baxter or of the way he had died. Yet each thought of the two aborigines who had killed him.

Would Yarry and Joey get out of the desert? Without horses they had little chance. Eyre and Wylie knew that they would never see those two aborigines again. Nobody would.

One wet morning, when Eyre and Wylie were walking happily in the rain, they came to a rough trail leading up a steep hill. Beyond that hill, Wylie said, was Albany!

Nearly five months had passed since the party of five men had set out from Fowler's Bay. Now Eyre and Wylie were almost at the end of the long journey.

The rain poured down. It dripped off the shiny leaves of the trees. The two friends were wet and cold. What

did they care? They would see Albany at any moment.

Soon they met a friend, walking along the trail toward them. He was an aborigine, one of Wylie's cousins. When he saw Wylie, he gave a joyful shout. "Wylie!" he cried, running forward.

The two aborigines held each other by the arms. Tears of joy flowed with the rain down their faces. Words raced from their tongues. Then Wylie turned to Eyre.

"He thought that we had died," he said. "Everybody in Albany thinks that we were lost in the desert."

Wylie's friend patted Wylie on the shoulder. Then he hurried off to spread the news. Tonight the black people would have a feast for Wylie.

Soon the bush was ringing with the sound of Wylie's name. Aborigines seemed to come from everywhere. "Wylie, Wylie!" they cried. Wylie looked at Eyre, who smiled and nodded. "All right, Wylie. Come back to me tomorrow."

West of the desert is Perth, the capital of Western Australia.

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Up the hill Eyre climbed alone. Sometimes he stopped and rested for a moment. He looked back at the weary miles behind. He looked up at the hilltop, and his heart beat fast.

On top of the hill was a large rock, higher than a man. Eyre reached the rock. He walked around it and looked down. There, below, were the roofs of Albany!

The rain poured down harder than ever. It sounded like the drums of victory. Edward John Eyre, the first

explorer to cross the continent, walked slowly down the hill to receive his welcome.

One day, perhaps, you will travel across Australia. But you will not have to walk as Eyre and Wylie did. Now you can go that way in an automobile over a good road. It is named Eyre Highway for the explorer. You can, if you like, ride in a comfortable air-conditioned train, or you can fly in an airplane. It is all very easy now. On this map you can see the routes of travel all over Australia.

When you do make that journey, you may think of Eyre and Wylie, the white man and the black man who first went that way together.

Questions the Maps Will Help You Answer

Look at the maps on pages 30 and 48, the vegetation map on page 126, and the rainfall map on page 46. Do you think they agree with the kind of country you read about in this chapter?

Learning More About Words

Some syllables are said with more force than others. For example, we say *carpet* with an *accent*, or force, on the first syllable. When we say *equator*, we put the accent on the second syllable. Accent marks like this (') are used to show people how to say words (for example, car'pet and e qua'tor). Copy the words below and put the accent marks where they belong. Words of one syllable need no accent mark. (*Do not write in this book.*)

de grees
rain fall

cont i nent
des erts

wa ter way
sett lers

Aus tra lia
har bor



AUSTRALIAN NEWS AND INFORMATION BUREAU

Wenda the Wombat is a friend to all the children who visit the zoo in which she lives.

THE WONDERFUL ANIMALS OF AUSTRALIA

Long ago when this old earth of ours was young, nothing lived upon it. Millions of years passed. Then the first living things appeared. They were tiny, simple living things floating in water.

The world grew older. In time those living things changed. They turned into different kinds of life. Some became plants. Others, which could swim, were the first fish.

Slowly, slowly time went on. Some of the plants began to grow on dry land. Some of the fish began to breathe above water and to live on the land. Their fins grew into little legs. They became the first land creatures.

Some of those early creatures were able to fly. They became the first birds. Some stayed on the ground and, as the long years passed, became animals.

Bones of those early animals and birds are found buried deep in old rocks. So also are the shapes of early plants. Wise men can read stories in old rocks, much as we read books. Old rocks tell us something about the plants, birds, and animals of long ago. We see that our world is ever changing.

The very oldest kinds of plants, birds, and animals died out. The climate became too cold for some of them. For others the climate became too warm or too dry. Some were killed off by other plants or animals.

Animals like those in Australia today once lived on other continents. However, they died out almost everywhere except in Australia. They did not die out in Australia, because the climate and the food were right for them. Also there were no big, fierce animals in Australia to kill them.

So Australian animals of today have, we might say, been left over from the past. They are much like the creatures of long ago. That is why they are different from the animals of other continents. That is why the Australian animals are very interesting.

The greatest family of animals which belong to Australia is the *marsupial* family. The mothers in this group have a pocket in their fur. In this pocket, or *pouch*, they carry their young ones. Australia is the home of the marsupials. The most famous of them is the kangaroo.

The Kangaroo

How would you like to meet a kangaroo? That is quite easy to do in Australia. Thousands of kangaroos live in the bush. They go about in groups.

There is no need to be afraid of a kangaroo. It will not hurt you. Indeed it will rush away from you like the wind. Watch it go! No other animal moves as it does. It cannot run. When it is in a hurry, its front legs never touch the ground. It jumps along on its big hind legs. It seems to bounce along as lightly as a rubber ball. Kangaroos have been known to leap thirty feet.

Every young kangaroo is called "Joey" by Australians. When Joey is born, it is only a little bigger than a peanut. But it knows enough to crawl into its mother's pouch. It travels by pouch until it is six months old.

There are many kinds of kangaroos. The biggest is the giant red kangaroo, which lives on the plains. It may stand eight feet high, taller than a man. Yet, it has a cousin no bigger than a rabbit. A third kind of kangaroo is the *wallaby*, which is about three feet high. Some wallabies live among rocks.

Kangaroos and wallabies that live on the plains are much the same color as the plains. They are dark or light tan. Kangaroos and wallabies that live in the woods have gray fur.

Things which give trouble are *pests*. Kangaroos are pests because they give trouble to farmers. Kangaroos eat grass and crops which farm animals need. In the dark they jump into wire fences and break them.

So farmers hunt kangaroos or get other men to hunt them. Kangaroo hunters sell the skins. The fur makes warm rugs. The leather makes strong shoes and purses.

Sometimes kangaroos are chased by men on horses. Some hunters use tall, thin dogs to help them.

A big kangaroo fights back when it can hop no farther. It turns and faces the hunters. It puts its back against a tree. There it waits for the dogs to leap at it.

A dog leaps! But the kangaroo is ready. With its front paws it grabs its enemy. Then it rips the dog with a sharp claw on its big hind leg.

Sometimes a hunted kangaroo jumps into a river or a water hole. If a dog rushes at it, the kangaroo will grab it. The kangaroo will hold the dog under water until it drowns.

A kangaroo, however, has no chance against a man with a gun, or against a pack of dogs. Its only hope is to flee. No wonder Joey learns to move fast.



AUSTRALIAN NEWS AND
INFORMATION BUREAU

A mother koala, with her baby on her back, sits in the fork of a gum tree. Both are eating leaves.

The Wombat

Like many animals, the *wombat* likes to dig. It is a strong little marsupial the size of a small pig. Its nails are like the sharp end of a shovel. They are just the right kind of nails for digging.

Wombats dig up grass and roots for food. They dig tunnels and make their nests at the far end.

At Healesville, Victoria, there is a garden like a zoo. Among the animals kept there is a wombat. Wenda is her name. Her fur is dark and coarse. Her nose is flat. Only another wombat would think her pretty. But she is a friendly animal. She loves to play games with the children who visit her. Sometimes for a joke she pushes in among them. Then she waddles off while the children

follow laughing. Wenda will even let the children carry her about.

All the children who visit Healesville know Wenda. She has become quite a famous wombat.

The Koala

Of all Australian animals, none is more loved than the *koala*. It is a little gray fellow, somewhat like a teddy bear, with a flat black nose. It lives in the treetops in the eastern states. Its strong, sharp, little claws take it up the smoothest tree trunk. It keeps its grip even in a storm when the branches jump about as if alive.

The koala is a lazy little creature. It likes to sit on a branch where it grows out from the tree trunk. There the koala sleeps all day long. When hungry, it blinks, yawns, and climbs out to the end of a branch. Supper is easy to get. Gum tree blossoms and the tips of young leaves are good enough.

Baby koala is very cute. When old enough to leave its mother's pouch, it travels on her back. It clings to her fur as she goes climbing through the treetops.

Once there were millions of koalas in Australia, but men shot them for their fur. Now only a few koalas are left, and it is against the law to shoot one. People are not allowed to keep koalas as pets. Koalas must be left in the bush, or they will not have families.

The Possum

If you hear a thump on an Australian roof, you may guess that it is a *possum*. You are likely to be right. Possums live in trees in most parts of Australia. Like squirrels they even live in trees that grow in towns.

They like to sleep all day in quiet, dark places. One day we saw a possum in a barn. It had been asleep. It looked at us with wide eyes but did not run away. It was as big as a cat and its nose was rather long, like the nose of a mouse. And it had a long tail.

Possums go about at night. Children who sleep upstairs sometimes see a possum in the moonlight. The little gray or brown marsupial may be sitting on a branch outside their bedroom window.

When possums live in the bush, they eat the leaves and blossoms of the gum trees. In towns, however, they are up to mischief. They eat rosebuds, fruit, and even small chickens.

One very tiny possum, the honey mouse, sucks honey from flowers. It likes to curl its tail around a small branch. There it hangs upside down, swinging in the breeze.

Another kind of possum can almost fly. Instead of wings it has some loose skin along its sides. This loose skin grows onto its front and back paws.

Up to a high branch this possum climbs. Then, spreading out its legs, it jumps, but it does not fall. Now that loose skin is stretched out like small, straight wings on each side of it. So instead of falling it glides through the air. It may glide for a hundred yards before coming to rest on some other branch.

In America we have a small animal called the *opossum*. It also belongs to the marsupial family of animals. But it is not like the Australian possum. Our little fellow kills animals for food and it also spends much of the time in water. It has never tasted gum tree leaves, and it would not like them anyway.

The Native Cat

Most marsupials are gentle creatures and can be made into pets. There are a few fierce marsupials, but they are rather small and do not attack human beings.

Among the fierce marsupials is the *native cat*. It is a *native* of Australia because Australia is its real home. It has not been brought to Australia like the cats that we know as pets.

In the same way the koala is a native of Australia. It is sometimes called the native bear. The possum is also

Australian possums.

AUSTRALIAN NEWS AND INFORMATION BUREAU



a native of Australia. The opossum is a native of America. We can speak of native plants, birds, and other things.

The Australian native cat is not a cat at all. It is about the same size, that is all. If tamed, it might behave much like a cat, but it would rather live in the wilds.

It has a long, pointed nose and spots on its fur. It lives among rocks and in holes in cliffs. It eats smaller animals, which it hunts at night, and it is rather fond of chicken.

The Tasmanian Devil

Sad to say, the *Tasmanian devil* can be as wicked as his name. This marsupial, which is a native of Tasmania, is a killer. In two nights one devil has been known to kill a tame sea bird, a cat, six geese, and fifty-four chickens.

The devil is very strong and has thick black fur. It is about the same size as a bull pup but is not so handsome. With its strong jaws it can crush a man's hand like a chicken's wing. It will escape from a trap by biting off its own foot. Yet even the devil can be tamed, if it is caught young and treated kindly.

The Tasmanian Wolf

Like the devil, the *Tasmanian wolf* is found only in Tasmania. It is not really a wolf, but it looks like one. It looks a bit like a hyena too. It also looks like a small tiger because of the stripes across its back. Sometimes it is called the Tasmanian tiger.

When settlers first brought sheep to the island, the Tasmanian wolf grew fond of mutton. It killed many



AUSTRALIAN NEWS AND INFORMATION BUREAU

A platypus, the world's strangest animal.

sheep. The settlers then set out to kill Tasmanian wolves, and so only a few are left. As a rule, the Tasmanian wolf and the devil can be found only in the wild western part of their native land.

The mother Tasmanian wolf carries her puppies with her in a pouch. She is a marsupial.

Other Animal Wonders

All the animals you have read about so far in this chapter are marsupials. There are about a hundred other kinds of marsupials in Australia.

Among them are *pouched mice*, which look like mice with pouches. There is even a *marsupial mole*. Like the real mole of other lands this odd little fellow moves about under the ground. It lives in sand hills in the center of Australia and eats ants and ant eggs. It has strong little claws for digging, and it seems to swim through the sand at a surprising speed. Mother mole can also move fast under ground, even with her young ones in her pouch.

Not all Australian animals are marsupials. There are many tiny creatures which do not carry their young ones in pouches. These creatures are mostly like our mice. There are also two wonderful animals that are very different from the others. They are the platypus and the *echidna*. Some people think they are the most exciting of all.

The Platypus

Years ago a man in Australia caught a very strange animal. He killed and skinned it. Then he wrapped up the skin and sent it to a friend in England. At that time nobody in England had ever seen this kind of animal. When the friend got it, he did not think it was a real creature. He thought that parts of different creatures had been stuck together as a joke. But it was no joke. It was a poor old platypus.

The platypus is a kind of animal-bird. It has claws like an animal but webbed feet like a duck. It has four legs but a duck's bill. It has fur on its body but hair on its tail. It can growl like a dog, but it has no teeth.

The platypus gets about. It swims under water, walks on the ground, and digs tunnels under the ground. It hunts at night, diving without sound into a pond or stream. It eats insects, baby frogs, and tiny fish. It likes a meal of insects and greatly enjoys an earthworm. Every day it eats food equal to a quarter of its own weight.

A platypus likes to be neat. It combs its fur with its claws after a swim or after it has been digging tunnels. It combs it after eating and before it goes to sleep.

Mother platypus lays eggs. The eggs have a shell like

thin leather. They are much like the eggs of a snake. Mother platypus lays about four eggs and holds them against her body until they hatch. When the babies come out of the eggs, mother platypus gives them milk from her own body. That is something animals do, but not birds or snakes.

Birds like nests. Some animals like holes in the ground called *burrows*. Mother platypus likes both. She likes to have her nest under the ground at the end of a tunnel. The burrow serves as a nursery. She keeps it nice with a carpet of gum leaves.

The father and mother platypus sleep most of the winter. They are shy creatures, and it is hard to get sight of them.

It is against the law to hunt the platypus. Australians mean to save the little creature which was once thought too strange to be true.

The Echidna

The echidna is sometimes called the Australian porcupine because its back is covered with thin spikes. If it meets anybody, it rolls itself up with the spikes sticking out, as if to say, "Don't try any tricks with me." The spikes are sharp and as long as a man's finger.

Like its platypus cousin the echidna digs a burrow. Mother echidna lays an egg like the egg of mother platypus. Mother echidna also grows a small pouch for a short time.

However, the echidna is a land creature only. It eats ants, which it picks up with its long tongue. Echidnas will never go hungry in Australia, which is a land of many ants.

The platypus and the echidna have one other strange thing about them. Their blood in some ways is like the blood of snakes. For one thing, it is cooler than the blood of the animals that we know. That is because the platypus and the echidna are very old kinds of animals. They remind us of the time long, long ago, when animals were more like birds and snakes than animals are today.

The Dingo

Through the night comes a sharp cry, which sometimes changes to a long howl. Then sheep press close to each other in fear. Wallabies stop and listen, and the koala climbs higher in its tree. A *dingo* is out hunting.

The sheep and the bush animals have need to fear that yellow-brown wild dog. The dingo kills even when it is not hungry. One dingo has been known to kill twenty or thirty sheep in a single night. Every year

A dingo. If you saw one of these animals in your garden, you might think it was a neighbor's dog.

AUSTRALIAN NEWS AND INFORMATION BUREAU



hundreds of thousands of sheep fall to the terrible jaws of dingoes. In Queensland alone, dingoes killed 250,000 sheep in 1923.

In some parts of Australia men have had to give up raising sheep. Instead, they raised cattle, which are too big for dingoes to attack. However a dingo will kill a calf if it gets the chance.

Year after year a war goes on—man against the dingo. Hunters go after the dingoes with poison, traps, and guns. Dingoes are even fought with airplanes, which drop poison baits.

A dingo stands about eighteen inches high at its shoulders. Its ears always point up and it never barks. It does not attack man, and indeed, it can be tamed.

Where did the dingo come from? It is not a marsupial. Neither is it like any other Australian animal. People think it was brought to Australia from Asia by the early aborigines.

Learning About Sounds

In the word “take” the vowel “a” is said to be *long*. In “man” the vowel “a” is said to be *short*. In the glossary, long “a” is marked like this: tāke; short “a,” like this: măn.

Copy the following words and mark the “a’s” to show which are long and which are short. Before you mark a word, say it over to yourself. Notice whether the “a” sounds like the “ă” in man or “ā” in take. (*Do not write in this book.*)

| | | | | |
|-------|-------|------|--------|----------|
| map | plain | rain | have | scatter |
| make | plan | ran | behave | land |
| brave | sand | day | cave | traveler |

BIRDS THAT WORK AND PLAY

Australian boys and girls know many wonderful birds. Over six hundred kinds of birds are found in Australia. Over half of these kinds are birds that sing. At dawn and dusk the fields and forests are gay with songs of birds.

Australia has many birds that dance. Some Australian birds like to copy sounds made by other birds. Some even learn to speak a few words. When a bird copies a sound, we say it is a *mimic*. A mimic is someone who copies the sounds or acts of others. Our mockingbird is a mimic.

It is fun to read about Australian birds. Some are like birds in other lands. Some are like no other birds in the world.

The Emu

The biggest Australian bird is the *emu*. It is three or four feet tall. If it stretches its neck up, it is as tall as a man. It looks like an ostrich, but it has no beautiful feathers. Like the ostrich, it cannot sing or fly.

City children see the emu only in zoos, but some country children know it well. They say it is a silly creature. When Australians mean that someone is silly, they sometimes say "as silly as an emu."

This gray-brown bird with long legs and a long neck

often bumps into trouble. It can run as fast as a horse can gallop, but it does not always look where it is going. Sometimes when it is running across a plain, it comes to a fence. Often it does not see the wire, and so smack, it goes right into the fence! Then there is an awful mix-up of kicking emu and broken fence wire.

Emus can become pests. They break fences. They eat grass needed for sheep and cattle. Even if they do not eat all the grass, they leave it dirty. Sheep and cattle often will not eat in a field if emus have been there. However, even the emu can be useful. It eats caterpillars, grasshoppers, and other insect pests.

Mother emu lays a big, dark-green egg like a small football. It is about six inches long with a hard shell like rough leather. Her nest is just a few sticks gathered together on the open ground. After she has laid about a dozen eggs, she goes off with a shake of her feathers. Most of the work is then left to father emu.

Father emu must sit on the eggs, at least in the daytime. He sits for eight weeks before the eggs are hatched. Even then mother emu does not help much. Father emu must bring up the family almost by himself.

The Laughing Kookaburra

No bird is more fun than the kookaburra. Often it makes the city parks ring with its laughter. Sometimes it just gives a chuckle.

The kookaburra, which is about eighteen inches long, has a strong beak. It is always on the watch for a small snake to eat. When it sees a snake, the kookaburra darts down and grabs it by the neck. Then it flies with the snake to a high branch and drops the snake to kill it.



AUSTRALIAN NEWS AND INFORMATION BUREAU

With its head lifted up, this emu is as tall as a man. Notice its large, strong feet.

If the snake is alive after that, the kookaburra picks it up and drops it again. When the snake is dead, the bird eats it.

Sad to say, the kookaburra also likes eggs or young birds for dinner. So it is a worry to people who keep chickens.

Kookaburras enjoy company. Half a dozen of these gray-and-white birds will perch on the same branch each night. The first to reach the branch begins to laugh.

When the next kookaburra arrives, the two shout with

laughter. There is more laughter each time another bird comes to join them. They laugh every few minutes until it is time to go to sleep.

The Lyrebird

In the forests of eastern Australia the *lyrebirds* live. They are as big as barnyard chickens, but they are shy and hard to find. They have no gay feathers, and they do not fly well. But they are so wonderful that people hide in the misty bush at dawn to see them.

Why is the lyrebird so wonderful? It is a lovely singer. It is also a clever mimic. It can even bark like a dog and mew like a cat. But that is not all. It is a dancer, too. When it dances it becomes a thing of beauty.

Each lyrebird and its mate live in one small part of the forest. They build their nest in a place they like, and they live there always. They have only one fluffy chick a year. Some bird-lovers say the chicks do not leave their parents until they are four years old. Their parents teach them how to sing and dance.

When spring comes, father lyrebird goes away alone. He hides in another part of the forest while his winter feathers drop and his summer coat grows. He does not sing during those weeks. He listens to the forest sounds.

When he goes home to his mate, he has new songs to sing, for he has learned to make new sounds. Perhaps he can mimic the songs of twenty or thirty other birds. One lyrebird can make the sound of men chopping wood. People have heard him mimic the voices of the men. He even makes a sound like a cry of pain. It is as if an axeman had cut himself.

In the late fall and early winter the lyrebird sings to

his mate. First he scratches earth together into a mound. From the top of the mound he sings his own joyful love song. The hen bird sits on a bough and listens to each lovely note.

When the song is over, he dances for her. First, he raises his tail until its two biggest feathers can be clearly seen. These two curved feathers form the shape of an old harp called a *lyre*. The bird gets his name from the shape of those feathers.

Then the bird brings his tail forward until it is over his head. His soft gray tail feathers then hang in front of him like a veil. He dances behind this veil of his own tail feathers.

The Bowerbird

Some bird-lovers believe that the *bowerbird* is the most wonderful bird in the world. It is both a dancer and a mimic. The most interesting thing about the bowerbird is that it makes its own little theater in the forest.

Many kinds of bowerbirds dance and sing in the Australian bush. We will tell you of one kind, the satin bowerbird, which lives in the eastern states.

How does this bowerbird build its theater? First, it makes a stage of twigs. It gathers small twigs and lays them on the ground one upon another. It keeps on working till the stage is about three inches high and three feet across.

Now it wants a little hall on its stage. This hall is a *bower*, which is a place closed in with sticks and leaves. It likes to dance through this bower, going in one end and coming out of the other.

To make its bower it builds two little walls of twigs which lean over and meet above the bird's head. Even this does not satisfy the bowerbird. It now paints the inside of its bower. For paint it gathers burnt wood, which it chews into a paste. For a brush it uses the side of its beak. It stuffs its beak with soft bark to keep the paint from running out the tip.

Lastly the bowerbird makes the stage pretty by laying many small colored things upon it. The things must be blue like the color of its own lovely coat.

People who live near bowerbirds have no hope of keeping blue flowers in their garden. The bowerbirds take the flowers for their little theaters.

Are birds ever jealous? Bowerbirds may be. They have been seen to act in a jealous way. One day a man saw a bowerbird creep up to its neighbor's bower and break it up.

The Brolga

Have you ever seen a dancing class of birds? Few people have. Some Australians riding across the inland plains have seen young *brolgas* learning to dance. Brolgas, which belong to a family of birds called *cranes*, are about three feet high.

At dancing class these slim birds stand in a row of twenty or thirty. An old brolga takes the class. He walks up and down in front of them as if to inspect the line. Then he gives a short cry. At this sign the young birds rise, fly a little way, and walk back to their teacher. They keep their line straight all the time.

When the birds are older, they dance without a teacher. Sometimes two birds dance together. They bow

to each other, turn, jump, and rock from side to side. They walk forward and back, all in time with each other. Sometimes forty or more will dance in two straight rows.

A Land of Parrots

Some Australian birds have dull feathers, and some wear colors as bright as the sunset. Among the birds with bright feathers are the *parrots*. About fifty kinds of parrots may be seen in the Australian bush. Indeed, Australia has more kinds of parrots than any other country.

Parrots and *cockatoos*, which are like big parrots, make good pets. They become fond of their owners, and they can learn to talk. Of course, they learn only a few words and short sentences. They do not know what the words mean. Yet they know they might get something to eat when they cry "Hello" or "Cocky wants a peanut."

Parrots are beautiful creatures. In some parts of Australia thousands of parrots or cockatoos may be seen flying together. We have seen a tree covered with cockatoos like white blossoms. A flock of pink-and-gray parrots is like a drifting sunset cloud.

The cockatoos, like our woodpeckers, help to save the forests. They dig into the wood with their strong beaks and eat the eggs of insects that harm the trees.

The Magpie

The Australian *magpie* is about eighteen inches long. It is black and white, and it lives in tall trees. Like many birds it is brave. It is always ready to fight anybody who comes near its nest.

This bird was called a magpie by early settlers. They



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This brolga shakes his feathers as he begins to dance.

thought it was like the magpies they knew in England. But it is no more a magpie than a koala is a bear, or the possum is an opossum. The Australian magpie really belongs to a family of birds called *shrikes*. However, we call it a magpie because it is still known by that name in Australia.



AUSTRALIAN NEWS AND
INFORMATION BUREAU

*The magpie's song is one
of the happiest sounds in
the world.*

The English magpie has no lovely song. The Australian magpie has one of the most beautiful songs among birds.

Some Australians keep a pet magpie. It eats the worms and insects in their gardens. It may be taught to say a few words or to whistle a few notes. But nobody can teach it anything as lovely as its own song.

The Australian Eagle

Have you ever watched an eagle fly? He seems hardly to move his wings as he glides through the air. Often he flies so high that he looks like a small bird. But when he is near, you can see what a very big bird he really is. The Australian eagle is as big as our American eagle. It is a yard long from beak to tail. Its dark brown wings spread seven feet from tip to tip.

Some Australian farmers do not like the eagle because they say that it kills lambs. Other farmers say that it kills many rabbits, which are pests.

Perhaps it does more good than harm. At any rate it is a lovely creature. When you watch an eagle fly, you cannot help thinking, "What a wonderful bird that is!"

The Black Swan

The first live Australian creatures to be seen in Europe were *black swans*. People looked at them in wonder. They had never seen black swans. All the swans in Europe were white.

Long ago a Dutch ship sailed along the southwest coast of Australia where no ship had sailed before. It came to the mouth of a river, and the sailors went up the river in a small boat. They reached a place where the river spread out like a blue lake. Then they came upon a sight that made them rub their eyes. Black swans! They had heard of black swans only in fairy tales.

The sailors caught four of the birds and stared at their long necks and red beaks. The birds had a few white feathers on their wings. But the rest of their feathers were as black as tar.

The sailors called that river the *Swan*. Perth, the capital of Western Australia, stands today on the banks of the Swan River.

Friends and Enemies

If you love birds, you need never be lonely in the Australian bush. Their songs seem to take you into some fairyland.

People go for miles to a forest near Melbourne to hear

the *bellbirds* sing. The notes of the bellbird are as lovely as fairy bells might be.

A shy bird is the *quail thrush*. This little creature has white spots on its shoulders. Its coat is the color of a chestnut. These colors make the quail thrush hard to see on the ground. Its song is a low whistle.

Beautiful little birds called *finches* are found in many parts of Australia. They gather by the thousands near inland water holes when the sun goes down.

Many *lovebirds*, small green parrots, are also kept in cages. They are called lovebirds because they seem to be so fond of one another.

There are many more lovely, clever birds in Australia, and one day you must see them for yourself. Australia is a fine country for birds to live in. It is wide and warm. It has no very cold winter, which means that there are many insects for the birds to eat.

For thousands of years Australia was a friendly land to birds. It was safer than many other countries, for the Australian birds had few enemies. The aborigines killed creatures for food but did not bother much about the birds. Also the birds had no bad enemy among the native animals.

The birds have been less safe since the white men arrived. They have cut down many of the trees in which the birds made their homes. They have needed the land for their animals and crops. Many birds have died or been driven far inland.

The white men took their cats to Australia. Some of the cats have gone wild in the bush. They are a worse enemy of the birds than any native animal.

The white men took foxes to Australia. They have

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*From the shape of the tail
feathers you can easily see
how the lyrebird got its
name.*



killed many of the lyrebirds and other birds as well.

The white men took sparrows and starlings to Australia. These birds have driven many native birds away from their old homes.

The white men killed birds for other reasons also. They shot them for food. They shot them to get their gay feathers for hats, and they shot them for sport. Also, they robbed nests to collect the eggs of birds.

But that was years ago. People are wiser now. Farmers who shot birds discovered that the insects and other pests increased in number. These pests often did more harm to fruit and crops than the birds had done.

Fewer people today see much sport in killing birds. They have much more fun by making friends with birds and by seeing how birds live.

Australian children today are friends of the birds. They leave the eggs in the nests, and they feed birds near the schools. They are helping to make Australia once again a friendly land to birds.

Questions the Text Will Help You Answer

1. How many different kinds of birds are found in Australia?
2. Why is Australia a good country for birds to live in?
3. In what ways do emus, magpies, and eagles help human beings?

Filling in the Spaces

White out these sentences and fill in the missing words.
(*Do not write in this book.*)

1. The biggest bird in Australia is the ____.
2. The ____ makes a noise like a laugh.
3. The ____ is a clever mimic.
4. The ____ dances in a little theater he makes himself.

More About Words

We have read about the long “ā” as in tāke, and the short “ă” as in măn, but what about the “a” sound in the words like “care” and “far”? They are marked like this: cāre, fār. Copy the following words and mark the “a” sounds. (*Do not write in this book.*)

| | | | |
|-------|---------|----------|---------|
| bare | mare | fair | mark |
| dare | harmful | starling | tar |
| stare | jar | cart | prepare |

MORE WONDERS OF AUSTRALIA

Many kinds of fish live in the seas around the United States and in American rivers. Some of the same kinds are also to be found in Australian waters. Australians catch the *barracuda*, *tuna*, *swordfish*, *pike*, *flounder*, and other fish we know.

Australia also has some very strange fish. For example, we might rub our eyes and look again if we saw a *mud skipper* climbing a tree!

The mud skipper likes to live in a *swamp*, which is a wet space of ground with bushes and perhaps trees growing in it. This fish is about four inches long. It is called a mud skipper because it goes skipping over the mud.

A tree called the *mangrove* grows in some Australian swamps. The trunks of the mangrove trees are often covered with mosquitos and other insects. For thousands of years mud skippers tried to climb up the tree trunks after the insects. In the end they learned to use their fins for climbing.

Another Australian fish got tired of seeing dinners that it could not reach. Instead of climbing it learned to shoot! The *archer fish* can shoot down an insect two or three feet away. It aims at insects on leaves above the water.

The archer fish shoots with its mouth. Drops of water are its arrows. If it misses the insect with the first shot, it keeps on shooting quickly.

The archer and the mud skipper live in the northern rivers. But pity the poor fish that live in the inland! They find homes, it is true, in the water holes, but when the water holes dry up in long, hot summers, the fish die.

Sometimes a pool is dry for two or three years. Yet after rain has filled the pool again we find baby fish in the water. They come out of eggs in the mud. The eggs had been laid in the mud by their mothers. When the water holes dried up, the mother fish died. Then the mud got hard around the eggs and kept them safe until rain fell again.

If you go out in a boat from the northern coast of Australia, you are likely to see a *dugong*. This creature grows about ten feet long. It lives in the sea, but it is not a fish. It eats a sea plant called *seaweed*. The mother dugong does not lay eggs like a fish. Instead, her babies are born in the same way that puppies or kittens are.

The dugong has little limbs called flippers. It uses its flippers to swim with. Mother dugong holds her baby between her flippers. She feeds her baby on milk from her body.

The dugong's blood is not cold like the blood of a fish. It is warm like the blood of land animals. The dark body of the dugong is covered with strong hair instead of scales. The head is a little like a human head when seen from a short distance. Sailors sometimes see dugongs swimming along with a baby dugong tucked under a flipper.

Australia has some strange frogs as well as fish. Have

you ever heard of a frog saving a man's life? That has been known to happen in Australia.

When the water holes dry up in a long summer, a man might die of thirst. Yet the aborigines know where to find water. They find a *water-holding frog*. This frog fills its body with water until it is like a small balloon. It digs itself into the soft mud and does not mind when the water hole dries up and the mud gets hard. It saves its own water and can get along until rain falls again. It can wait for months or even years. A thirsty man can fill a cup with clear, sweet water from one water-holding frog.

Crocodiles

Land animals that breathe with lungs and have cold blood are called *reptiles*. Their tough skins seem to be made of strong fish scales joined together.

Reptiles are a very old family. They were among the earliest land animals to appear on the earth. Some which stood up on their hind legs were over twenty feet high. All were ugly, and many were savage. We need not be sorry that these monsters are not around today.

The largest reptile in Australia is the *crocodile*. This monster swims in water and crawls on land. It has a very tough skin and long jaws with big teeth.

Australia has two kinds of crocodiles. Both live in the far north. One kind, about six feet long, makes its home in pools and rivers where the water is fresh. It is not a danger to man. The other kind is a monster often more than twelve feet long. It lives in salt water. It swims in the sea along the coast, and it sometimes comes up the rivers.



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Would you like to meet this goanna on a walk in the bush?

This monster lies in wait along the riverbanks. It likes to get a meal by catching some animal that has come down to drink. The crocodile catches a drinking horse or cow by the nose and drags the poor beast under the water, drowning it. The monster also catches men. How would you like to swim in one of those rivers? Most people feel just as you do about it.

We have *alligators* in the warm south of the United States. Alligators are somewhat like crocodiles, but their jaws and teeth are a little different. Both reptiles are ugly, and it would be hard to like either of them.

Sun Lovers

Australia has many kinds of *lizards*, which look rather like young crocodiles. But some of them have skins of bright colors and are pleasant to look at. Australian lizards are mostly small creatures. If left alone, they will

not hurt you. If you worry them; some of them may bite you. Some lizards try to scare their enemies away by looking fierce.

In America there is one kind of lizard whose bite would poison you. It is found in our Southwestern States. No Australian lizard has a poisonous bite.

Lizards crawl, and some can move with wonderful speed. They dart so fast that the eye can hardly follow them. A few Australian lizards, when chased along the ground, stand up and run along on their hind legs. They look like babies of the monsters that roamed our earth long, long ago.

The *goanna*, which grows to a length of eight feet, is the largest Australian lizard. Most goannas are four or five feet long. The goanna was at first named the *iguana* after the lizard that lives in South America and the West Indies. But the goanna and the iguana are quite different kinds of lizards.

Lizards live in rocks or holes. Some Australian lizards burrow in the ground. They like to have a kind of back door to their burrows. If an enemy comes in through the front door, they leave home through the back door.

Most lizards eat meat. Many eat spiders, worms, and insects. Some eat smaller lizards, as well as birds and birds' eggs. Some birds eat lizards. Goannas like to rob chicken pens. They eat the eggs and the mother hens.

When frightened, a goanna climbs a tree. In its fright it might try to climb you. So be kind to a goanna if you ever meet one. It is no joke to have one of those fellows climbing up you with its sharp claws.

Some people have made pets of goannas and other lizards. Would you like to have a goanna for a pet?

Snakes Alive!

Australia has many snakes. Some are poisonous, and these kill about seven Australians every year.

The *tiger snake* is colored like a tiger—yellow with dark stripes around it. It is the most dangerous snake in Australia. However, even the tiger snake does not go out hunting people. In some ways snakes are like most human beings and other creatures. They do not hurt you unless they are angry or afraid.

Very few Australian snakes grow more than six feet long. One kind, the *python*, may be sixteen feet in length. The bite of a python has no poison in it. It kills in a different way. It hugs things to death.

The Australian python lies in wait for its meal to come along. Any hunted creature is called a *prey*. The python's prey may be a wallaby, a rabbit, a possum, a duck, a small snake, or some other creature. The python grabs its prey with its big jaws. Then the big snake wraps itself around its prey like a rope. It squeezes the life out of its prey and then swallows it whole.

A few people keep snakes as pets. Snakes are said to be good pets, but they do not show fondness for their masters. Still, we should not like to be hugged by even the nicest python.

Ants That Keep "Cows"

Nobody knows how many ants there are in Australia. There are over six hundred different kinds of ants, and no doubt there are millions of each kind. They are a pest when they come into houses and steal the food. They are also a pest when they bite you. Yet, like almost all wild creatures, they are useful.

AUSTRALIAN NEWS AND
INFORMATION BUREAU

A large python rests in a tree and waits for his prey.



Ants are useful because they keep the bush clean. When an animal dies, the ants quickly clean away the flesh from its bones. Lizards and the echidnas, which eat ants, find them not only useful but delicious.

Ants are interesting creatures because of the way in which they live. Many surprising stories can be told about them. For example, some ants keep cows. For cows they use small insects called *aphides*, which eat young green leaves. Aphides have sweet, sticky drops in their bodies. Ants love to eat these drops. They milk the aphides by stroking them.

The word *aphides* means a number of these insects. When we speak of only one we call it an *aphis*.

Ants take care of their aphis cows. In the fall the ants carry the eggs of the aphides into the ant nests. When the young aphides hatch in spring, the ants carry them out of the nest. They place the little creatures on the roots of the right food plant for aphides. When the

babies have grown large enough, the ants carry them to the young leaves.

Enemies might kill the aphides, or a storm might wash them away. So the ants build tiny barns of earth and sticks over the feeding aphides. Here the aphids cows are safe. They are safe from rain and the hot sun. They are even safe from enemies, for a guard of ants at each barn door turns all enemies away.

Insects That Build Towers

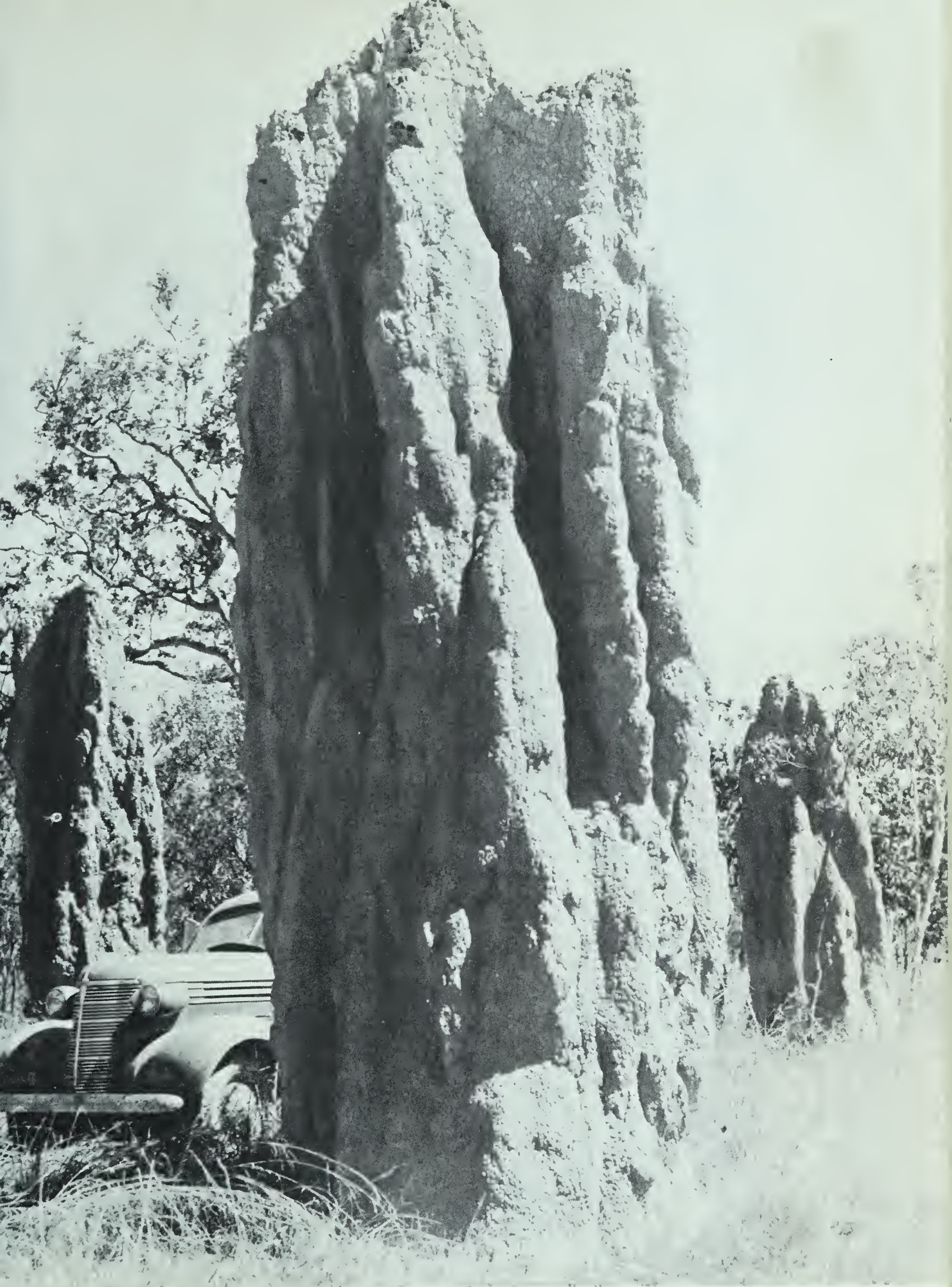
Sometimes on a summer evening a cloud of insects is seen. The *termites* are out. Birds catch the flying termites in the air. Other small creatures feast on the insects that fall to the ground. Millions of flying termites are killed and eaten.

Perhaps only two termites escape. The pair drop their wings off and dig a hole. This becomes their nest. Then the female termite lays thousands of eggs.

Soon many young termites are hatched. Some grow to be worker termites. They keep making the nest bigger. The others become soldier termites. They guard the workers from ants and other enemies. A fighting termite shoots tiny white drops from a hole in its head. These white drops drive insect enemies away.

The nests, which are made of earth, have many rooms and passages. Food, which may be wood or grass, is stored in some rooms. Baby termites are kept in rooms while they grow up. In other rooms dead termites are neatly packed away.

Termites of different kinds are found in many lands. We have them in our country. They are found in most parts of Australia. They are pests because they chew



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This tower of earth is a nest built by termites.

wood. They do great damage to houses, furniture, fences, and railroad ties.

In northern Australia people build their houses two or three feet above the ground. The houses stand on legs of hard wood that the termites do not eat. On top of each leg is a cap of iron or tin. This is to stop termites from climbing up the leg into the house.

The termites in northern Australia build nests like towers. These nests may be as high as twenty feet. It is a surprise to see these towers of earth and clay standing like small castles on the plains.

One kind of termite makes a nest that always points north and south. The nest is shaped like a big, rough door. The narrow ends point north and south. The sides face east and west. Why is that? No one knows for certain, but this much is clear. The nests when built that way get as much sunshine as possible.

Goannas and some birds lay their eggs in termite towers. Their babies, when hatched, find a meal of termites waiting.

Some Spiders Are Fun

Australia has spiders that dance, spiders that catch small fish, spiders that make lids on their burrows.

Australia has over two thousand kinds of spiders. Only three kinds are known to be a danger to man. They are a danger because they have a very poisonous bite.

One dangerous spider is the *red-back*, which is found in all parts of Australia and in many other countries. It is very much like the *black widow* spider, which is a poisonous spider in our country.

One spider uses a kind of fishing line to get its food.

The line, which the spider lets out from its body, is only an inch and a half long. The bait also comes from the spider's body. It is a sweet, sticky drop, which the spider puts at the end of the line.

The spider then swings the line from one of its legs. In time a moth comes along. It tries to take the bait and gets stuck to it. Then the spider pulls up the line and has moth for supper.

One Australian spider makes a noise like a whistle. This odd creature lives on the inland plains. It makes a noise just like the whistle of that shy little bird, the quail thrush.

Visit to a Coral Island

One day we stood on a hill on the coast of Queensland. We looked out to sea. In the distance a broken line of rocks and islands could be seen. It was the *Great Barrier Reef*.

A *reef* is a ridge of rocks in the sea. A *barrier* stops people or things from moving forward. The Great Barrier Reef stops ocean waves.

For over a thousand miles the Great Barrier Reef lies beside the coast of Queensland. Some parts of the reef are ten miles from the shore. Some parts are as far as 150 miles away. Beyond the reef stretches the Pacific Ocean. Great waves roll across the ocean toward Queensland, but they break on the barrier reef.

The waves crash on the reef with a great splash. The rocks stand firm as if giants had made them. Yet those rocks were made by tiny creatures no larger than the head of a pin.

Those tiny sea creatures are coral *polyps*. They do



AUSTRALIAN NEWS AND
INFORMATION BUREAU

Coral of many different colors is found on the Great Barrier Reef.

not set out to make rocks. The polyps grow shells outside themselves called *coral*. Millions of bits of coral stick together. As thousands of years pass, a reef of coral is built up. Sand and pieces of broken coral pile up on reefs, forming small islands called coral islands. There are hundreds of small coral islands along the barrier reef.

Pam Harnett is a girl who lives in Queensland. She spent a school vacation on one of those coral islands. Pam was twelve years old at the time. She says that she will never forget the wonderful things she saw on the reef.

Pam liked seeing all the sea birds on the island. She counted over a hundred nests in one small tree alone. Many sea birds nested in holes which they dug in the ground. In some parts of the island it was hard to walk without stepping on a bird.

Every evening Pam saw turtles crawl out of the ocean. On their backs the turtles had broad, brown shells about three feet long. The shells looked like meat dishes carried upside down. Pam learned how to sit on a turtle's back and go for a turtle ride down to the sea.

The turtles came to the island to lay their eggs. It was

fun to watch them. Pam waited quite close to one big turtle which crawled up the beach just after sunset.

The turtle, with deep sighs, began digging in the sand. It dug a hole with its flippers. After the hole had been finished, the turtle laid its eggs. A turtle lays about 120 eggs in about an hour. The eggs lie in the hole until the young turtles are hatched.

Pam watched the turtle cover its eggs with sand. Then with another deep sigh it crawled slowly back to the sea. Digging had been hard work for the big, heavy turtle, but now its job was finished.

That turtle would never see its eggs again. The sun and sand would keep them warm. In ten weeks the baby turtles would be hatched. But, sad to say, most of them would soon be killed by birds and crabs.

Pam saw thousands of crabs on the beaches and among the rocks. She soon learned not to be afraid of them, but she was always careful when she picked them up. Crabs have two sharp claws called *nippers* on their front legs.

Once Pam was sitting on the beach reading a book.

AUSTRALIAN NEWS AND
INFORMATION BUREAU

***It is great fun to take a
ride on the back of a huge
turtle.***



A sound like a whisper made her jump up. The whole beach seemed to have come alive! Hundreds of tiny crabs were marching together in groups.

They were *soldier crabs*. When that brave army saw Pam, it turned in fright. Little soldiers that could run the fastest climbed over their slower friends in front. All were hurrying to the wet sand. In less than a minute every soldier crab had dug a little hole for itself and disappeared.

"Well," laughed Pam, "I wouldn't care to have that army on my side."

Pam used to look forward to the time when the tide was low. The *tide* is the regular rise and fall of the sea. When the tide was high, the rocks around the island were covered by the sea. When the tide was low, Pam could walk on the rocks around the island. Among the rocks were deep, clear pools. Whenever Pam looked into those pools she found a wonderful sight.

The sides of the little valley in the pool seemed to be

Two islands of the Great Barrier Reef.

AUSTRALIAN NEWS AND INFORMATION BUREAU



bright with blossoms. They were not blossoms really but living coral. Some pieces of coral were violet in color. Others were yellow or pale blue or rose red. Some were shaped like the horns of a deer. Others were like tiny castles.

Seaweed grows among the coral. Pam saw seaweed that was brown, bright green, or deep red. The plants made little forests in the still, clear water.

Small fish, like swimming jewels, played in the pool. Some of the fish were blue and silver, with fins and tails like gold. Some had stripes of red and blue. Sometimes they swam slowly. Then suddenly they flashed away like sparks from firecrackers.

It was hard to leave that wonderful coral island on the Great Barrier Reef. But Pam went back to school with a fine plan. She would learn about birds and beasts, insects and spiders, reptiles and fish. "I want to know more about them," she told a friend. "I seem to have just found out what a wonderful world I live in."

Something to Write About

Perhaps you would like to write a story about Australia. You might think of some ideas yourself, but here are a few:

- a. You see a dugong.
- b. How a frog saved a man's life.
- c. An aphid which is brought up by ants.
- d. A visit to the Great Barrier Reef.

Something to Do by Yourself

Draw a map of the east coast of Australia. Put in the Great Barrier Reef, and show where Brisbane is.

STONE-AGE MEN

Across the plain comes a line of aborigines, walking one behind another. The men, tall and strong, lead the way. They look about them with keen eyes. They are hunters on the watch for a kangaroo, a snake, or any other creature that is good to eat.

Behind the men come women and children. They carry light tools of wood and stone. Three of the women also carry babies. The whole group numbers less than thirty.

All day the aborigines have been walking across the plain. Now they are near the end of their journey. They will camp near that long, narrow water hole which lies ahead. Tall gum trees grow beside its banks.

The aborigines are thirsty. They do not talk. The afternoon sun glows on their bare black bodies. Their bare feet move almost without sound over the thin, dry grass.

Each hunter carries a *boomerang*, a spear, and a *spearthrower*. He does not like to move a yard without those precious things. They are his hunting tools.

A boomerang is a hard, bent piece of wood with a sharp edge. It is about two feet long. When thrown, it whirls through the air. If it does not hit anything, it turns in the air and comes right back to the man who throws it. The aborigines throw the boomerang at birds and small animals.

A spearthrower is a short, flat stick with a hook at the end. A spear goes farther when thrown with the aid of a spearthrower.

One of the black hunters stops. He makes a sign with his hand. The women and children sit down on the grass. They are glad to rest. Then the hunters spread out in a long line facing the water hole. With their spears ready they move toward it. Here they hope to find food.

Slowly they creep forward, about sixty yards apart. Nothing else stirs in the afternoon heat. Then suddenly a flock of screaming parrots flies from the gum trees.

A group of wallabies are drinking at the pool. The

Several aborigines practicing throwing long spears with their spearthrowers.

CUSHING





AUSTRALIAN NEWS AND INFORMATION BUREAU

One aborigine can make a fire by twirling a stick of hard wood on a block of soft wood.

sudden noise alarms them. They turn to run, but they are trapped between the pool and the line of hunters.

Some of the wallabies dodge between the hunters and go leaping away. All but two of the animals escape. Those two have not been lucky. They lie in the grass with spears in their sides. Tonight there will be wallaby for dinner.

Making Camp

Two wallabies are not enough. More food is needed. The hunters go off to see what they can find. The women and children go forward to the water hole. They must get the camp ready for the night.

There is much to do, but first they jump into the water and splash about. Like all their people they are always ready for some fun. The water feels nice and cool after the long, hot walk.

Red and white water lilies with flat green leaves float on the pool. The leaves are big and do not sink even when the children stand on them. In the lilies are seeds, which the women crush between flat stones. With these seeds the women will make water-lily cakes.

Two old men come back to the camp to make the fire. They have never used matches. They light the fire in the old way of their people.

First, they gather some dry grass and sticks into a little heap. Then the women bring them two pieces of wood. One piece is hard. The other piece is soft.

The old men sit down on the ground. They hold the soft wood between their feet. Then they rub the hard piece quickly back and forth across the soft wood. It is as if they are using a saw.

The hard wood cuts a narrow hollow in the soft wood. Soon the hollow fills with wood which has been ground to powder. This powder is so hot that it smokes. The old men shake it onto the dry grass and blow on it. Smoke comes from the grass. Then the grass bursts into flame. Quickly the flaming grass is pushed against the sticks. The campfire burns.

Meanwhile some of the women and girls have been making rough little huts of bark and branches. These huts, called *wurlies*, will be shelters tonight against wind or rain. The wurley is the only kind of house the aborigines build.

Now let us see what the hunters are doing.

Dooli and the Emu

Dooli is the youngest of the hunters. We find him moving through the bush very quietly. His father says, "Dooli is like the shadow of a cloud." Dooli is tracking an emu. He has not seen the big bird, but the tracks are fresh.

The aborigines are good at tracking different creatures. Indeed, the aborigines are said to be the best trackers in the world.

Dooli learned to track when very young. He could track almost as soon as he could walk. By the time he was seven, he knew the tracks of every living thing about him. Dooli knows people by their tracks as well as we know them by their faces.

Though young, Dooli is one of the best trackers among his people. His father says, "Dooli can almost track an eagle through the sky." At this moment Dooli is thinking about an emu. The bird must be near. There it is!

The emu is eating grass in a large clear space beyond the trees. Dooli cannot hit the emu with his spear. The bird is too far away.

Dooli knows that if he scares the emu it will run for its life. Then no man in the world could catch it. But how is Dooli to get near it. He cannot lie down and creep through the grass, for the grass is too short. The emu would see him.

Dooli makes up his mind to use an old hunting trick. He goes back through the trees a little way. He looks on the ground for a dry stick. Here is one that will do. Dooli holds it in front of him like the long neck and small head of an emu.

Now he moves slowly into the clear space beyond the trees. The emu sees him. Dooli pretends to be another emu. He walks slowly back and forth near the trees. He moves the stick like an emu's head and neck. He pretends to eat grass with the stick.

The bird stops eating and watches this queer thing. The bird's head turns this way, then that. Dooli pauses. Then again he moves about as emus do. The emu stares. It forgets to be afraid.

Inches at a time Dooli draws nearer to the emu. Now he is thirty yards away, now twenty. Suddenly he strikes! His spear flashes through the air. The emu turns to run, but the spear brings it down.

Later Dooli's father said, "Not even the lightning strikes faster than Dooli's spear."

A Bush Supper

Back in the camp Dooli finds that two other hunters have been lucky. One has come back with a green neck-lace around his neck. Twenty minutes ago it was a sleepy snake. The other hunter found a fat goanna. It was a bad day for that goanna to lie sleeping in the sunshine.

The children gather round while the dead creatures are cooked. The wallabies, the emu, the snake, and the goanna are put into holes in the ground. The holes are lined with glowing ashes.

Soon the creatures are taken from the holes and placed on green branches to be skinned. No plates are used for the meal. The old men, using stone knives, cut off pieces of hot meat for each aborigine. Everyone has his share.



EWING GALLOWAY

An aborigine gets ready to throw his boomerang.

As the stars come out, the people sing. Then, beside the fire, Dooli tells the story of his hunt. He is a fine actor, and the whole camp gathers round as he acts out the tale.

Another hunter springs up. He acts the part of the emu. He turns his head this way, then that. The others laugh happily.

Today the aborigines have traveled far. Now they are tired. Soon each family crawls into its wurley. They sleep on beds of leaves.

A night bird calls softly, "Mo-poke! Mo-poke!" But the only answer is the sigh of a sleeping baby.

Like Men of Long Ago

Hundreds of aborigines like Dooli and his friends still live in parts of Australia. Perhaps you wonder why they live as they do. Why do they not wear clothes? Why do they not live in houses? Why do they have to go hunting for their food?

These aborigines still live today as men lived in very early times. They are like people who have walked out of a history book.

Many thousands of years ago no men lived in houses or on farms. No man knew how to tame animals or grow crops. The men of long ago lived in caves or in little huts like the wurlies of the aborigines. Like the aborigines they hunted wild animals for food. They also ate berries, roots, insects, snakes, and wild fruits. All men once lived in that way. Life was the same for men whose skins were black, white, yellow, or brown.

Those men of long ago learned to use simple tools and weapons made of stone. For that reason we call that time the *Stone Age*. Today many aborigines still use stone for their tools, so they are called a Stone-Age people.

The aborigines of Australia had no animals which could be made to work. They found no seeds which could be used for growing crops. So they went on being hunters. They had to keep moving about so as not to kill all the animals in one place.

They did not build houses. Why should they? They could not stop to live in them. Also they did not load themselves with clothes. They could do without clothes in warm Australia.

They learned to make many tools of different kinds. One tool is the *digging stick*, which is a kind of spade. The aboriginal women use this stick, with its hard, sharp end, to dig up food. They dig up roots and tasty worms. They dig down to the burrows of little animals. They dig for *honey ants*, whose bodies are fat with honey. The aborigines find that honey ants are very good to eat.

It is not easy to make a boomerang if you have only a chip of stone to work with. It takes many hours to make a spearthrower or a stone ax. The aboriginal children must learn to be good at making these things.

The aborigines live in groups called *tribes*. There are many families in a large tribe. Everybody in the tribe has to work. The food killed by the hunters or dug up by the women belongs to everyone alike.

No tribe has a king or a chief. The old men are the leaders. They know the laws of the tribe. They know its old stories. The aborigines never discovered how to write. So their laws and old stories are kept in the memories of the people.

The laws of the aborigines are not the same as ours. They do not live in the same way as we do. They have laws which suit their way of life. For example, each tribe has its own hunting grounds. It is against the law to hunt on the grounds of another tribe. If a hunter did that, his own tribe would punish him. He might be put to death.

A fight between tribes is likely to finish in one day. A few men may be hurt, some badly, but the trouble is soon over. The aborigines never have real wars. They do not like war any more than we do.

A Party in the Bush

Sometimes a tribe of aborigines have a party. They call this party a *corroboree*.

We like to dress up for parties. So do the aborigines. Some paint their bodies with red and white earth. Others make masks out of feathers and human hair.

The women and children collect wood for the fire.

A big fire is part of the fun. They build the fire in a clear space among some trees.

Now all is ready for the corroboree. Women and children and old men watch from the edge of the clear space. The round moon rises beyond some slim, black gum trees. A hush falls.

Then, from behind the trees, comes a loud humming sound. It is made by a man blowing into a wooden pipe. The sound never stops. It gets loud and then soft, loud and then soft. Now voices are heard. It is the song of the dancers. Into the clear space they come in a line, bending and stamping and slapping their sides.

The leaping flames of the fire seem to dance too. Shadows twist and curl with the painted bodies. The

The snakes which these aborigines are carrying will be roasted and eaten. They taste much like chicken.

EWING GALLOWAY



watching people pound the earth with boomerangs or sway to the thud, thud, thud of a hundred bare feet.

The hunting done in the last few days is acted in plays without words. Now they cross rivers. Now they spear a crocodile. Next comes a figure creeping from a wurley. He acts a sad tale, perhaps, or a story of long ago. Then an actor dances into the light of the fire. He mimics some man whom he knows. He does not say who, but everyone can guess. The watchers roll with laughter.

For hours the fun goes on. Some of the aborigines are wonderful dancers. They are as good in their own way as any dancers in the world.

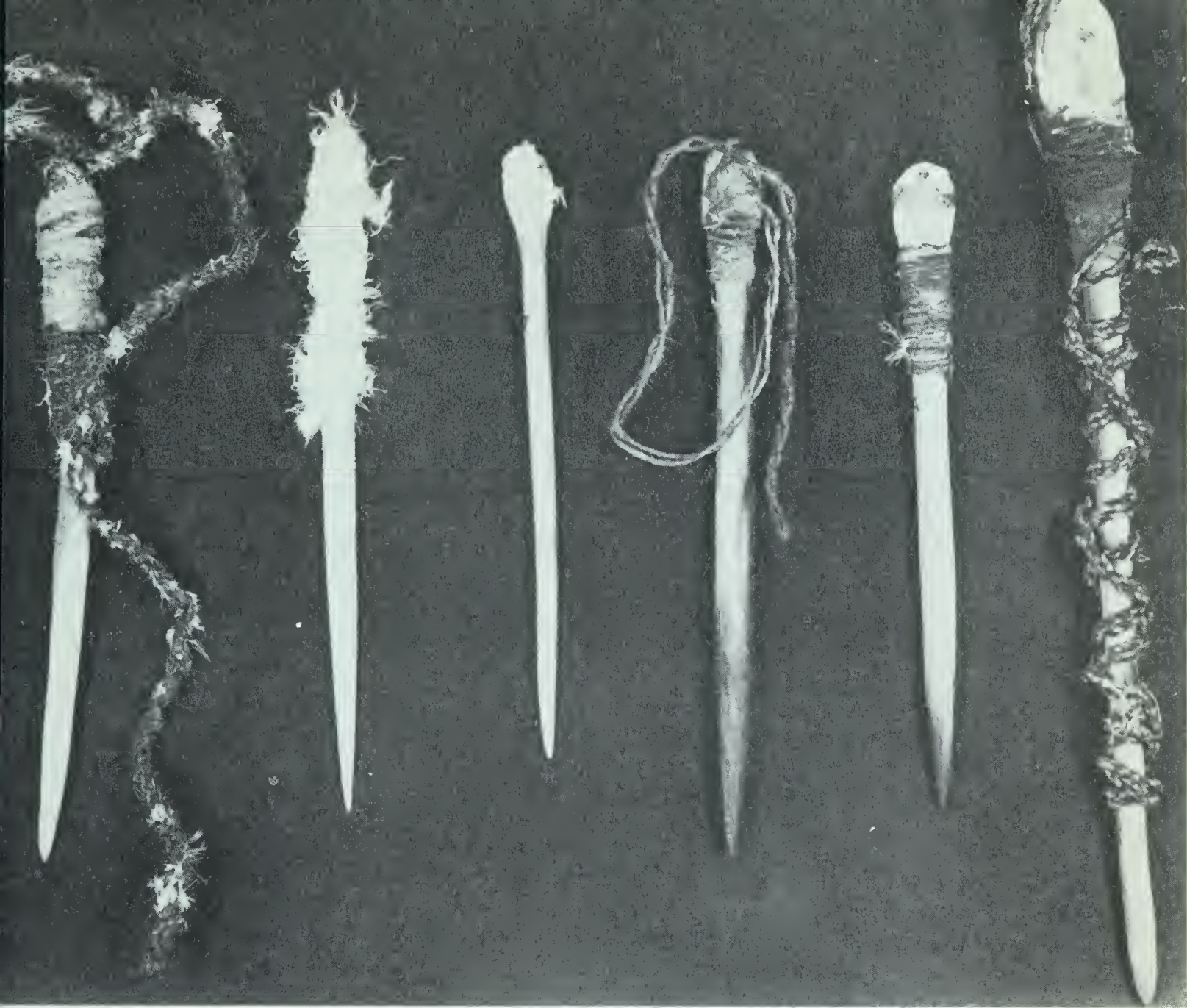
Sometimes the girls have their own corroborees, or sometimes the most important person is some boy about twelve years old. Indeed, a whole corroboree may be held in one boy's honor. After this day he will learn many secrets of his tribe. After this day he will be a boy no longer, but a man!

Magic

When the aborigines see something which they do not understand, they say, "It is magic." They believe that their wise men can make magic. They make magic by acting. If they want a wind to bring rain, they act like the wind. Perhaps they make a noise like the wind or scatter dry leaves along the ground.

The aborigines have no gods, but they believe in ghosts. They think that friendly ghosts help them, and that unfriendly ghosts bring them aches, pains, and bad luck.

Each tribe believes that a certain creature is holy. The platypus is the sacred animal of one tribe. The goanna



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Each tribe has a pointing bone that is a different size and shape from the bones of other tribes. The bones are decorated with string, feathers, and bits of leather.

is sacred to another. The koala is sacred to a third. No aborigine kills the creature that is sacred to his own tribe.

The tribes also have sacred places, sacred signs and stones, and sacred songs and dances. When the aboriginal boy becomes a man, he learns about these things. They are the secrets of his tribe.

When an aboriginal girl grows up, she learns some of these secrets. She also learns some sacred things which only the women know about.

An unfriendly ghost among some tribes is called the *bunyip*. He is supposed to dwell in water holes. Aborigines are afraid that the bunyip will get them if they don't watch out.

Magic is sometimes useful. It gives an aborigine courage when he believes that friendly ghosts are helping him. But magic can do harm. It can even seem to kill people.

One aborigine may take up a magic bone and point it at a second aborigine. This is called "pointing the bone." The second aborigine may not see the pointing of the bone, but someone will be sure to tell him. From that moment he believes that he is about to die, and die he does. He has really been scared to death.

When the bone is pointed at some men, they do not die. They are not frightened. They do not believe in magic. Indeed, there is no need to be afraid of magic. People who think in a grown-up way no longer believe in it.

A Desert Meeting

William Hatfield, an Australian writer, likes to go into the wild parts of the continent. He has met many aborigines, and he likes them. In his book, *I Find Australia*,* Hatfield tells of a meeting with some aborigines.

He was riding one day over a dry inland plain. He was worried because his two horses were thirsty. He had no water to give them. The sun appeared to have dried up the water hole that he was seeking.

Hatfield stopped to rest his horses in the shade of a

* *I Find Australia*, by William Hatfield, published by Oxford University Press, Melbourne.

tree. It was then that he saw something move on a distant ridge. He stared. It was a puff of smoke. Another puff followed. It was an aboriginal smoke signal.

He could read that signal. It was meant for him. It said, "Who are you?"

Hatfield forgot how tired he was. Quickly he collected some dry grass and twigs. In a moment he had a fire lit. He broke a branch off the tree. He waved the branch over the fire. Three puffs of smoke rose in the air. They were his answer. They meant, "Friend."

In an hour four aborigines appeared. They came forward with care, watching the white stranger. Hatfield made a sign of welcome. He put his rifle down against the tree. The aborigines nodded. They understood. They put their spears on the ground to show that they were friendly also.

The aborigines were very thin. They had been having a hard time. No rain had fallen for months. Many animals had died of thirst. The few animals that were left had all been chased by dingoes. That meant they were frightened and hard to hunt. So the poor aborigines were starving.

Hatfield had a bag of flour. He went to get some for his visitors. At that moment one of the black men gave a cry. He pointed. Three hundred yards away a wallaby was leaping across the plain.

Hatfield ran to his gun, picked it up, took quick aim, and fired. The wallaby gave a last leap and then fell on its side. With a yell of joy one of the aborigines ran off and brought the dead beast back.

The aborigines sent up a smoke signal. It was a signal to their wives and children, who soon appeared. The



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A dugout canoe made from a tree trunk is pushed through shallow water by three crocodile hunters.

wallaby was cooked, and all joined in the welcome feast.

"Where can I find water?" Hatfield asked the black men. He knew a few words of their language.

They took Hatfield and his horses to the ridge where he had seen their smoke. Deep among some rocks was a fine, clear pool.

When night fell, Hatfield slept with the desert people. Next morning he wanted to go on with his journey. "Where," he asked, "is the next water hole along the trail?"

The aborigines shook their heads. "Don't go," they said. "The next water hole has dried up. The water hole beyond is far away. Your horses would die of thirst. You would never get through."

Grungunja, the oldest native, put his hand on Hatfield's arm. "Please stay with us," he said. "Stay by this water hole until rain comes again."

Hatfield stayed. Each day he hunted with the aborigines. The hunting was not easy, but now the aborigines had the help of Hatfield's gun. A bullet goes much farther than a spear. Hatfield could kill more food for his new friends than they could have got themselves.

As they talked around the campfire at night, their friendship grew. Grungunja said his tribe did not trust white men. Some white men had harmed his people.

Grungunja had only one arm. He had lost the other arm, he said, because of a white man's bullet. A policeman had shot him for spearing cattle when his tribe was hungry.

"If that is the white man's law," said Grungunja, "it is not like the law of our people."

Grungunja said that there were many good white men, but there were some bad white men also. A few bad white men had come near the camp not long ago. They had shot at every aborigine whom they saw. Why did they do that wicked thing?

"It is because those white men were afraid," said Hatfield. "People often do bad things when they are afraid."

Hatfield was sorry to hear about those foolish white men. He was glad to hunt with the aborigines and be their friend. They were not so thin now, thanks to his help.

Every day Grungunja climbed a little hill to make magic. It would, he said, bring rain. That would make things better for the aborigines and their white friend. Grungunja knew that the white man must go on his way.

The old aborigine was lucky. After only three weeks of magic, the rain came. It poured down heavily. Soon wide pools of water lay everywhere across the plain. From his hill Grungunja looked down proudly.

Then Hatfield caught his horses and rode away. He was sorry to say good-bye to Grungunja and his people.

"They helped me," said Hatfield to himself. "They showed me where to get water. And I helped them. I helped them to get food. How much better it is when white men and black men help each other!"

The Lost Hunters

The white men and the black men have not always helped each other in Australia. When the early settlers arrived from England, they wanted land for farms. So they took the hunting grounds which belonged to the aborigines. The black hunters did not like this. They speared some of the white settlers and their cattle. Then white men went forth and killed many aborigines.

The black hunters tried to keep their hunting grounds, but they did not know how to fight a war. So the tribes were driven off the best lands. Most of the tribes died out. In other places the aborigines stopped living in

tribes. These aborigines may sometimes be seen today near the cities and country towns. They dress like white people. They seek to work like white people, but they seem sad and lost.

Some aborigines work on sheep and cattle ranches, but they are not really happy. Every now and then they give their clothes to their friends and go away. They go back to the bush, back to the old life, and seek comfort in it.

In the far inland and in the north many aborigines still live in tribes, in the way of their fathers. These are the aborigines you have been reading about. They have hunting grounds kept safe for them. No white man is allowed to take these lands.

Aboriginal boys learn to throw spears by playing at hunting.

AUSTRALIAN NEWS AND INFORMATION BUREAU



White men who know much about the aborigines like them very much. They say that the aborigines are kind and wise. They are good at singing and dancing and painting. They also love a joke.

Many white Australians are sorry about the way the aborigines have been treated in the past. They want more done, today and in the future, to help their black Australian friends.

Writing a Paragraph

Dooli is twelve years old. He could get along very well if he were left all alone in the middle of the Australian bush. What things would you have to learn before you could do so?

Quiz Questions

1. Why are the aborigines called Stone-Age people?
2. How do they get their food?
3. Why do they not build houses?

Learning More About Vowels

In a word like “meet,” the “e” sound is long. In “met,” the “e” sound is short. In the glossary the long “e” is marked like this: “ē”; the short “e” is marked like this: “ĕ.” It is the same with other vowels. For example, bīte and bĭt, nōte and nōt, ūse and ūs. Try to mark the long and short vowels in the following words:

| | | | |
|------|-------|------|-------|
| peek | right | boat | crust |
| peck | dig | cot | music |
| need | might | frog | huge |
| bet | hide | toad | must |

THE WIDE, WARM SPACES

Australia's far north is a thrilling land! Here the aborigines live and hunt in the old way of their people. Water buffaloes roam through grass that grows higher than your head. In the mud of mangrove swamps the fierce crocodiles hide, laying their eggs or waiting to catch their prey.

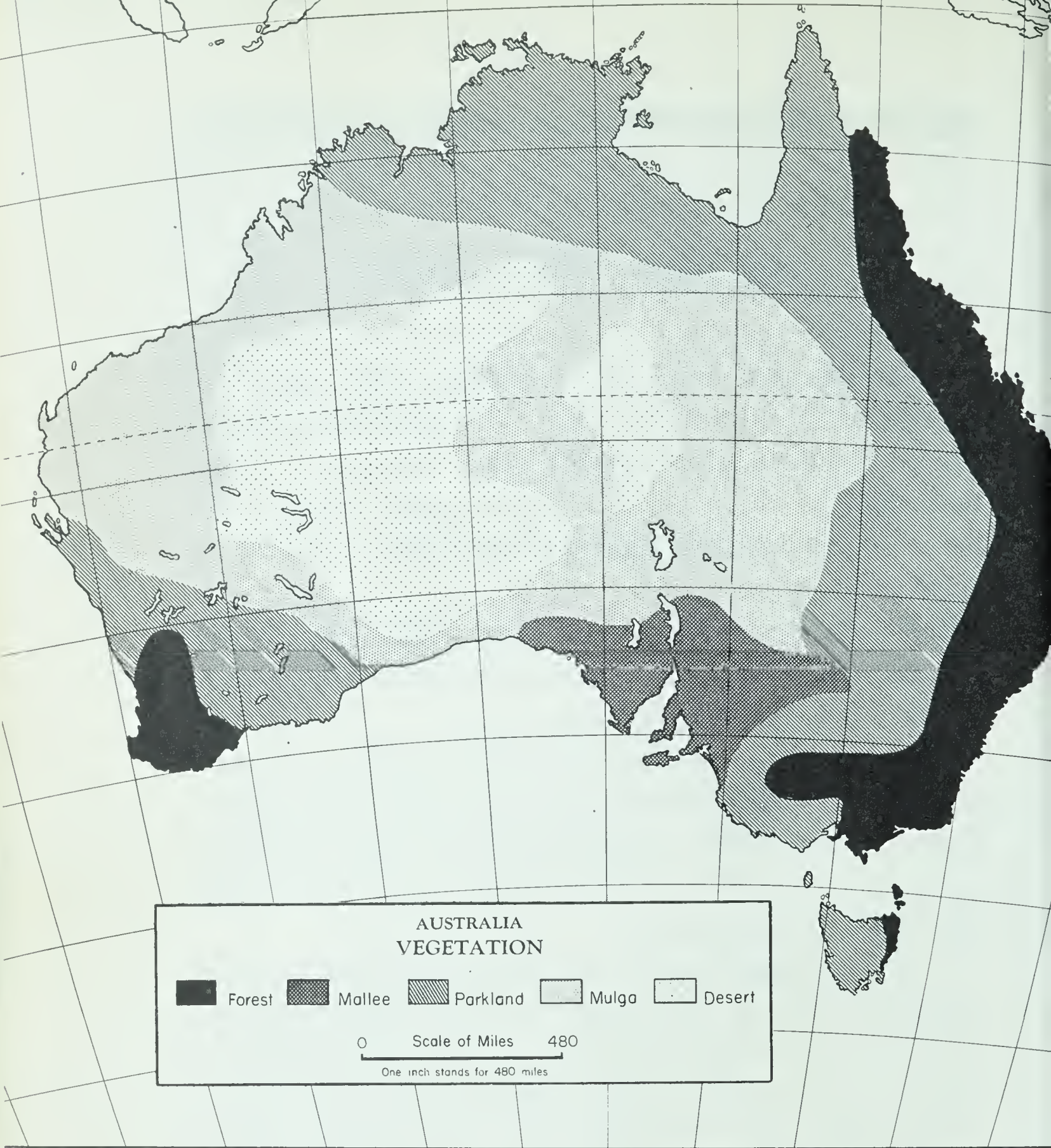
Few white people live in the far north. They do not like the weather there. It is hot even in winter, and in summer it is hot and very wet.

All through the summer the rain beats down. It rains almost every day. Floods spread across the country. Homes become little islands in seas of mud. The rainy season lasts from November through March. The people call this season the *wet*.

The rainy season ends as suddenly as it begins. Then the floods dry up. The earth gets hard. The grass turns brown and the flowers die. For seven months there is hardly any rain. The people call this season the *dry*.

There are only two seasons, the wet and the dry, in northern Australia. There is no spring and no fall.

The mangroves grow along the coast, even in salt water. Palm trees sway on the beaches. *Bamboo*, like giant grass, grows along the riverbanks. However, the charm of the north lies in the gum trees, tall and graceful. The gums do not grow close enough together to make a forest. Open grassy spaces lie between them. The



scene is like a park, and so we call it *parkland*. If you look at the map on this page you can see where the parklands are.

A few cattle graze in the northern parklands, but they find that much of the grass is sour and hard to eat. Only the water buffaloes enjoy this grass.

The water buffaloes are big and dangerous. They have long horns, which are sometimes eight feet from tip to tip. In Asia water buffaloes do work that is done by horses in many lands. Water buffaloes work well on ground that is wet and soft. In northern Australia the ground is very muddy during the wet, so early settlers brought in water buffaloes to work for them.

Later those settlers went away. The buffaloes, left behind, became wild. Their numbers grew. Today hunters shoot them for their thick, strong hides. When a buffalo sees a hunter, it puts its head down and charges. The hunters must be brave and quick.

Many aborigines live in *Arnhem Land*, which you can find on the map on page 30. It is kept as a home for the black people, and only a few white men have ever gone there.

On the western coast of Arnhem Land is Darwin, the capital of the Northern Territory. Darwin has a *port*, a place where ships load and unload goods. It has a fine harbor with deep water.

The tides are very big along the northern and north-western coasts. There is always water in Darwin harbor. But only mud is left in some other northern ports when the tides go out. At such times any ship in port is left standing high and dry!

Darwin also has an *airport*, a place where airplanes land. People who fly to Australia from Europe and Asia land at Darwin. It is the first part of Australia that they see when they arrive.

Darwin is small and hot, but the Australians are making it into a nice little town. They want it to be beautiful because it is Australia's northern gate.

In the Cattle Country

South of the parklands are the wide, warm plains. Here are ranches with great herds of cattle, lonely homes, and long, shady water holes. The ranches are big. The people are few. You can ride for a week without seeing a trail, a fence, or another human being.

The Australians call a sheep or cattle ranch a *station*. The sheep or cattle are called *stock*. The men who take care of the stock are *stockmen*. The Australian stockmen are much like our cowboys. They wear wide hats and gay shirts. They love their horses and are wonderful riders.

White men own the cattle stations, but most of the stockmen are aborigines. The cattle on the stations are raised for their beef and hides. These wild, shy beasts roam the plains for months without seeing a human being.

After the wet, riders come and round up the cattle. Some of the cattle are driven away, never to return. They are driven to some far town where they are killed for beef.

On some of the plains we see very few trees. Miles of grass wave in the wind. But over most of the plains we find the small, gray *mulga* tree, a cousin of the wattle. After a rain the mulga comes out in yellow blooms and spreads a sweet smell across the land.

In the long dry, when the grass is brown and scarce, hungry cattle eat the tips of mulga branches. The little mulga has saved the life of many a starving cow.

Gum trees grow around the water holes, which are places of beauty on the hot, red plains. Wild ducks and



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This aboriginal stockman is rounding up cattle that have been grazing among the trees.

geese swim on the clear waters. Parrots and finches gather like blossoms in the trees. Cattle rest in the shade, and at sunset the wild horses come to drink.

The Red Heart

No part of Australia has more color than the Center. That is the name Australians give the red plains in the middle of the continent. How red those plains are! Sand, soil, and rocks are red. At sunset even the mountains in the Center glow like burning coals.

These mountains are thin, old ranges with steep, bare sides. Narrow passes lead through them like giant cracks. Cattle drink at fresh pools in the mountain passes. But there are not so many cattle here as on the plains farther north. There is less food for them.

Mulga and other trees grow on the plains, but often there is little grass. Not much rain falls in the Center. There is no rainy season. It is a sunny land, hot in the daytime and cold at night.

A long dry spell may last for years. When heavy rain does come, how great the change! Within two days a soft green carpet grows, hiding the red soil. The dry *spinifex* grass puts forth its blooms. It grows yellow like fields of giant corn. The *desert pea* springs up in patches, black and scarlet. White and yellow flowers seem to dance in the wind.

Out from the mountains the rivers rush. Suddenly broad streams pour across the land. But in three days or perhaps a week the river beds are dry again. The sand and sun have drunk up the water.

Here and there are deserts too dry even for the mulga. Small stones cover the ground, or rows of sand hills face the traveler. Some sand hills are hundreds of miles long.

Among the plains and deserts lies the little town of Alice Springs. Here lawns and gardens, orange trees, and iced foods welcome weary travelers.

Alice Springs, they say, is a long way from anywhere. It is a thousand miles south of Darwin on the north coast. It is a thousand miles north of Adelaide on the south coast. Alice Springs is almost in the exact center of the continent.

Look! There goes a policeman on a camel! Yes, people



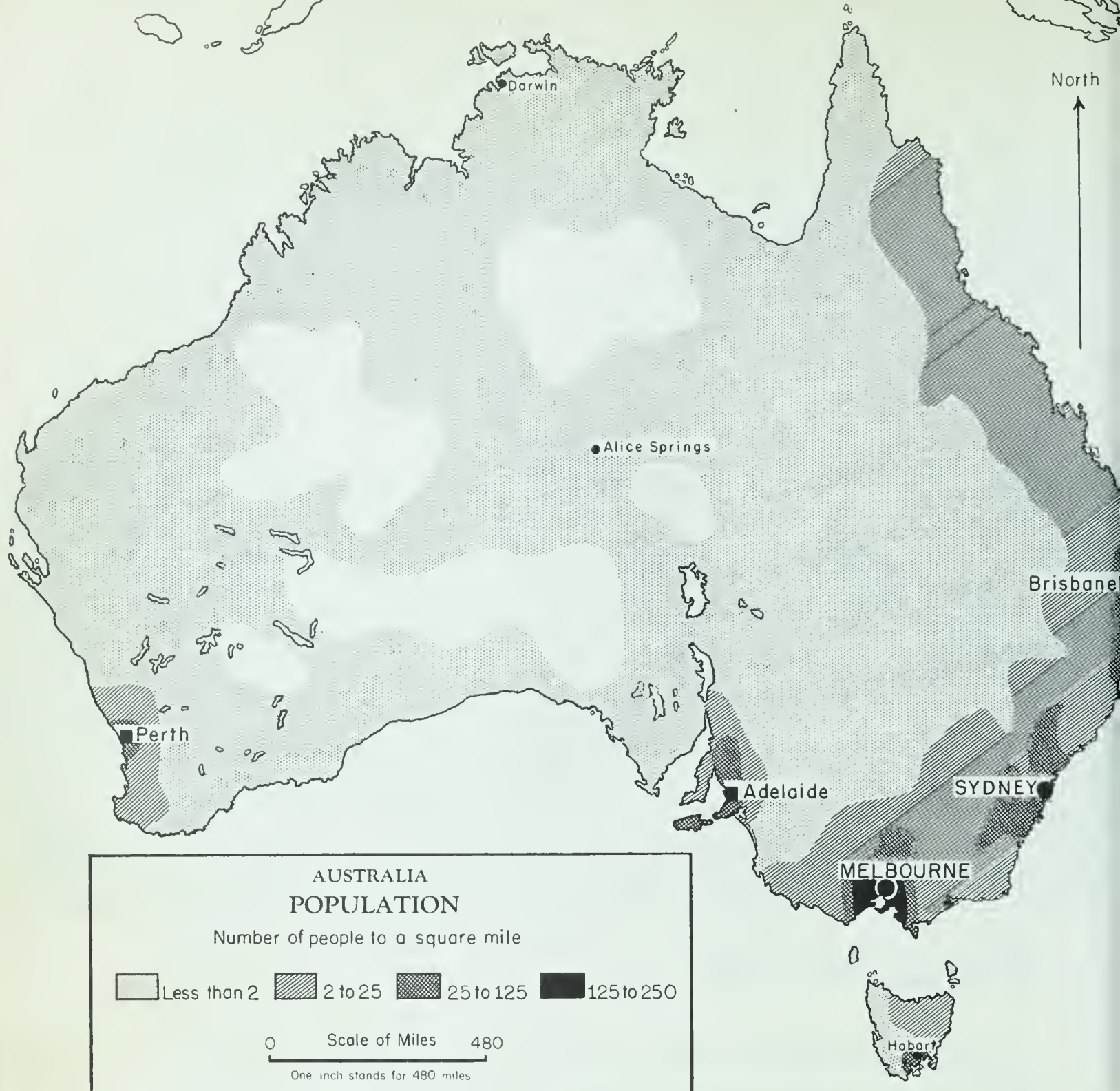
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In the dry Center, Australian policemen make their rounds on the backs of camels.

in the Center often ride camels. They are more useful than horses on hot, sandy plains. Camels carry more than horses do, and they can go farther without water. If there is need, camels can go ten days or more without a drink.

The camels in Australia were first brought from India, but they seem to be at home on the red sands of the Center. Camels are seen only in the inland plains where roads and water holes are few.

Few people go far west from Alice Springs. We might ride one thousand miles into the west before seeing any sign of man. As we go south from the Center, at first the



On this map you can see where most of the people live in Australia. Why are the largest cities and most of the people found on the east coast?

country seems empty. Only a few cattle are seen. The flat plains have almost no trees on them. Then, far to the south, we see gum trees again, but they are poor, thin gum trees known as *mallee*. Only when we get near Adelaide do we see many farms and homes. Only then is the great dry inland left behind.

Land of the Lonely

Big! That is the word for the inland, for those miles of plains and deserts extend in every direction from Alice Springs.

When Australians speak of the inland, they mean the spaces far from cities. They mean the spaces where hardly any people live. You can see those spaces on the map on page 132.

Why do so few people live on the inland? It is because few people can make a living there. Only twenty men are needed to work a cattle station as big as West Virginia.

Why are the stations so large? It is because the grass is usually thin. The grass is thin because little or no rain falls for months at a time. Australia, remember, is a dry continent. Thus each sheep or cow must wander about to find enough to eat. When the grass is thin, a herd needs many miles of ground on which to graze.

Because the stations are so large, the station homes, called *homesteads*, are far apart. If you lived in a homestead, your nearest neighbor might be a hundred miles away. You might have to ride forty miles to your own mailbox. You might travel five hundred miles each time you go to town. You might see no friend or visitor for weeks at a time.

The Bush Mailman

Jack is a bush mailman. He takes the mail to people who live far from towns. Over plains and through the mulga Jack drives his truck. He drives five hundred miles on every trip. He is away from home on his mailman's round for two weeks at a time or even longer.

Often there is no road nor even a trail where Jack must drive. He just charges with his truck across stony plains, dry creeks, and miles of sand hills. All day he drives in the burning sun. At night he lies under the stars and listens to the dingoes howl.

Jack knows how lonely the inland people are. He knows how eager they are to get their mail. Sometimes during the wet, Jack may be caught in the floods. He may stop on some hill above the water. But as soon as the flood goes down, he is on the move again.

Jack carries not only letters but also passengers and heavy loads. Often his truck breaks down. It gets knocked about because the country is so rough. It gets stuck in damp creeks. It gets choked in storms of dust. It sinks into soft sand. Sometimes it takes Jack a whole day to get the truck across a sand hill.

Yet Jack carries on with a smile. Year after year he is on the job, and neither heat nor sand nor flooded river stays him long.

The Bush Nurse

Barbara is a bush nurse. She came from the city of Melbourne to help the people of the inland. She lives in a small hospital in a little inland town. Another bush nurse lives there, too.

Sometimes a message comes to the hospital, brought by a rider on a tired horse. A man in some far camp has been badly hurt. He cannot be moved. "Please, nurse, come at once," the message says.

Off goes Barbara on her work of mercy. She may have to ride through a blinding storm of sand. She may wade through a flood. Once she swam a river, holding onto



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An ambulance is backed up to the airplane of one of the flying doctors in the Center.

the tail of her horse. By good luck no crocodile was near.

The Flying Doctor

Out of the skies he comes—the flying doctor. In his airplane he races over mulga and desert. Over the flood waters he hurries to homesteads where his help is needed.

Not many years ago life was cruel to inland people who were sick or hurt. They had to lie in pain until a doctor came. Sometimes they had to suffer for days or weeks.

For many homesteads the nearest doctor was five



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Notice the aerials for the radio, an important object on this lonely cattle homestead.

hundred miles away. Days passed while somebody rode to get him. More days passed while the doctor was on his way to help. Floods might keep the doctor away for weeks at a time. Too often the doctor came too late. Death had won the race.

Today every homestead has a *landing field*, a clear space where airplanes may land. Now the doctor comes on wings. A bush nurse may come with him.

In days gone by, the inland people were taken to the hospital in a cart or truck. That meant a long journey over a bumpy trail. It meant hours or days or sometimes weeks of pain. Now the flying doctor takes them in his airplane. It is a journey of an hour or two.

Australia was the first country in the world to have a flying doctor. Now there are seven of them in Australia. They fly all over the inland, a space more than thirty times the size of Florida.

The Land of Friends

Today the people of the inland are not so lonely as they used to be. Now they have the automobile, the airplane, and the radio.

A few old railroads go into the inland, but they do not go far. The only railroad to go far inland is the one from Adelaide to Alice Springs. Not long ago, if you were going north to Darwin, there was only a rough trail. During the wet this trail became a bog. No one could pass along it.

Then a few years ago a fine road was built between Alice Springs and Darwin. People can travel along this road even during the wet. It has now become easy to travel north and south across Australia. Big trucks carry fresh fruit, butter, green vegetables, and other needed goods along this road. They bring comforts that many homesteads never knew before.

The airplane is a great help. Now people can fly quickly about the inland. They can go to the cities in a day or two instead of traveling for weeks through dust and heat. With the airplane came the flying doctor. Now there are also a flying dentist and a flying mailman. However, the bush nurse and the bush mailman still do fine work in some of the lonely places.

Radio has been a great gift to the inland. Every homestead has a two-way radio set. Music and news, plays and jokes, flow by radio into distant homesteads. You can talk into these sets as well as listen through them.

These special two-way sets were needed for the flying doctor service. If people were sick or hurt on some far homestead, how was the flying doctor to know? Radio now tells him in a moment.

The women of the inland are not so lonely as before. True, many still live in distant homesteads. They still see no friends for weeks or months. Now the radio brings friendship to them. Now, thanks to their special radio sets, the women of the inland can talk to their friends every day.

Is the nearest neighbor one hundred miles away? No matter! Her voice and laugh come through the air as if on wings. Old friends talk and new friends are made. Radio has spun a web of friendship across the continent.

Making a Map

Draw a large map of Australia. On colored paper make small drawings of cities, aborigines, cattle, sheep, crocodiles, and other interesting things. Paste the drawings on the map where they belong. Aborigines should be placed in Arnhem Land, across northern Australia, in the Center, and in Western Australia north of Perth. Maps in this book will help you to place other things.

Learning More About Words

Other vowel sounds are “ă” as in ask, “à” as in sofà, “ê” as in rivêr, and “û” as in bûrn. Mark the following words. (*Do not write in this book.*)

her
turn

adopt
task

Quiz Questions

1. Why do few people live in northern Australia?
2. Why do people sometimes ride camels in the Center?
3. Why are the inland sheep and cattle stations large?
4. How have airplanes made life easier in the inland?
5. How has radio made life easier for the inland people?

ENEMIES OF THE FARMERS

Barbara Scott was only twelve years old when the Big Trouble came. That was several years ago, but even today Barbara thinks of it often. She says that she will never forget that time. When you read this story you will see why.

Barbara lives on a cattle station in western Queensland. The station is owned by her father, Jim Scott. Barbara lives with her father and mother on the homestead.

Near the homestead is a creek. After a heavy fall of rain the creek is full of water. But at the time we are telling about—the time of the Big Trouble—there had been no rain for months. So there was no water in the creek, except for a small, muddy pool here and there.

If you asked Barbara, “What do you mean by the Big Trouble?” she would say, “Why, I mean that terrible *drouth* we had.”

Do you know what a drouth is? A drouth is a time of dry weather when rain is needed. Farms need rain at certain times. A farmer looks for rain when his young crops are growing. Rain will help them grow. If no rain comes, the crops may die. The farmer will say, “They were killed by the drouth.”

An owner of a station needs rain for his pastures. If no rain comes, the grass begins to die. Then the sheep



AUSTRALIAN NEWS AND INFORMATION BUREAU

Herding cattle on the dusty plains of the Northern Territory. The stockman looks much like our western cowboys.

or cattle may not find enough to eat. They may starve, and the owner will say, "They were killed by the drouth."

Drouths happen in most countries. We have them in the United States. Australia has drouths which spoil crops and kill many sheep and cattle. Barbara is the one to tell you about them. She lives in the dry inland, where no rain falls for months at a time.

There was that terrible drouth of several years ago. The one that Barbara calls the Big Trouble. What a sad time that was! For many months there was no rain. The creeks dried up, and the grass turned brown. The cattle grew weak. They could not find enough food or water.

Every day they became thinner and weaker. Every day more of them died.

"If only we could help the poor things!" cried Barbara.

But nothing could be done. There was no spare food or water to be had for hundreds of miles around. Rain alone could make the grass grow. Rain alone could save the cattle. The Scotts could only sit and hope.

One day Barbara asked her mother, "What will happen if it doesn't rain soon?"

"All our cattle will die," said Mrs. Scott.

Barbara moved to a window and looked over the dry, brown plain. The sun burned down. In the distance some cattle were reaching up for the leaves of a small mulga tree. Soon even this poor food would be finished.

With a sigh Barbara moved over to the radio. "It's time for the weather news," she said.

Every day at this time Barbara and her mother listened to the weather report. The radio might give them great news. It might tell them of rain in the north. A big storm, perhaps. That would be wonderful. It would mean the end of the drouth. If it rained in the north it would rain here. That was how the last drouth had ended.

Barbara was only five then, but she can well remember that time. A rainstorm swept south through the country, ending the drouth and bringing life to dying stock. If only this would happen again!

Barbara turned on the radio. "Here's hoping, Mum," she said, "for a rainstorm in the north!"

"Here's hoping," her mother said with a smile.

Where was Barbara's father at this moment? Mr. Scott was a few miles away, riding slowly over the plain. He

had been counting the dying stock. Now he was riding back to the homestead. His face was full of sorrow. His shoulders were bent. His eyes were looking down. He had seen many sad things today.

He had seen the bodies of cattle which had died in the drouth. He had seen other cattle that were about to die. He had seen the tracks of dingoes that had fed on the dead beasts. He had seen crows in the trees, waiting to eat.

Hundreds of cattle had died. Yet there was still hope, for hundreds were still alive. Hundreds could be saved even now, if only rain came soon.

His horse stopped and Mr. Scott looked up. A cow was standing in the way. It was quite still. Mr. Scott waved his hat and gave a shout. The cow did not move.

The cow was dying. In search of grass it had wandered far from a water hole. Now it was too weak to get back. It was dying of hunger and thirst.

Barbara's father sighed and rode on. He was only a mile from the homestead now. He tried not to think about the cow. Then suddenly he saw something which made him forget the cow altogether.

Coming toward him was a rider. It was Barbara, riding at a gallop. She was racing toward him, waving her hat in her hand.

Her father frowned. He wished Barbara would ride with more care.

But Barbara was shouting something. What was she saying? Rain? A big rainstorm in the north?

Yes, yes! Rain was on the way. The news had come through on the radio! This meant that the drouth was ending at last!

Mr. Scott sat up straight on his horse. His face broke into a huge smile. Now Barbara joined him, and they went riding together, singing, back to the homestead. Already in the north they could see a cloud, no bigger than a man's hand.

They Found Hidden Waters

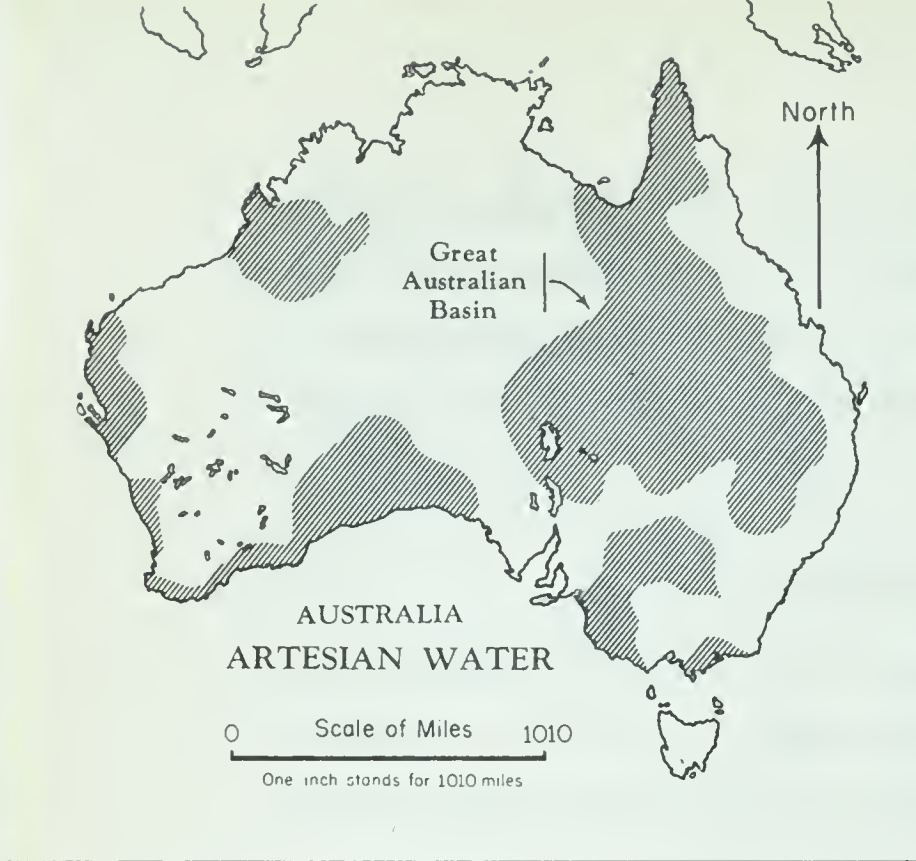
Yes, Barbara could tell you much about drouths. So could other Australian children who live in the country. They have seen crops fail to grow. They have seen creeks go dry. They know.

In Australia most of the sheep and cattle are raised

Lunch at a cattle station. The roof, stone floor, and potted flowers help to keep the family cool.

AUSTRALIAN GEOGRAPHICAL SOCIETY





On this map you can see where artesian water is found in Australia.

in rather dry lands. They are raised in areas of little rainfall. Millions of sheep and cattle have died when no rain came.

Looking for ways to fight the drouths, the Australians made a wonderful discovery. They found water, lots of water! It was not in lakes, and it was not in rivers. It was under the ground!

This water lay in huge underground *basins* of rock or clay. It was rain water. Some of it may have fallen from clouds thousands of years ago. It trickled down through the soil to a basin. These basins are simply underground stretches of rock or clay. They are called basins because they hold water.

No one can see them. We know that they are there because men get water out of them. Some of them are more than a mile deep. Some are very large. Indeed, one of them is twice as big as Texas. It is called the Great Australian Basin, and it lies under the western plains of Queensland and New South Wales. You could ride over these dry, thirsty plains and never think there was water far below.

The basins are called *artesian basins*. The water that they hold is *artesian water*. To get the water up, men cut small holes deep into the ground. These holes are called *bores*. They are like the bores which we put down when drilling for oil. The water comes rushing up.

Artesian basins are found in many countries. They are found in the United States. Australia has the biggest artesian basin in the world. If you turn to the map on page 144, you will see where the Australian artesian basins are.

In Australia, people do not drink artesian water. As a rule it is too salty. However, sheep and cattle will drink it. So artesian water has been a great thing for Australia.

The Australians have put down thousands of artesian bores. The water is given to the stock. Sheep and cattle can now roam over grasslands where once they would have died of thirst.

Taming the Rivers

The Australians fight drouths in many ways. One way is to put down artesian bores. Another way, as we shall see, is to tame the rivers.

Remember that many of the larger rivers start near the east coast and flow inland. In long, hot summers they stop flowing. They dry up and die away in the sand.

Too little water! That is usually the trouble, but not always. Sometimes the trouble is just the opposite, too much water. For after heavy rains these rivers may rise above their banks and flood the land for miles around.

Too little water or too much! Either is bad. If there is too little, the stock may die of thirst. If there is a flood, the stock may drown.

The Murray River is the greatest river in Australia. It has been tamed and put to work. Let us see how the Australians tamed the Murray.

First we must remember where the Murray flows. It has its beginnings in the Australian Alps near Mount Kosciusko. After it leaves the mountains, the Murray winds across the southeastern plains. You can see it on the map on page 30.

Every spring the Murray gets a lot of water from the mountainsides. Rain and melting snow pour into the river. Down on the plains the river rises. Sometimes it used to flood.

This is what the Australians did. They chose a valley through which the Murray flowed. Across this valley they built a high, strong concrete wall a mile long. They called it the Hume Dam.

In flood times the dam controls the Murray. It holds some of the water back. In this way the dam stops the Murray from flooding over the plains.

What happens to the water which is held back? It goes into a lake which has been formed behind the dam and is stored there. It is no longer wasted in floods.

Then the long, hot summer comes. The Murray needs more water. Very well. There is plenty in the lake. Men let some water through the dam, as much as the Murray needs.

That is how dams work. They save up water for use in the dry season. Dams have other uses also. They are built in all countries. The Grand Coulee Dam in our own country is the biggest dam in the world.

Australia has few rivers, and so the people try to make the best possible use of water. They have built



AUSTRALIAN NEWS AND INFORMATION BUREAU

Water is pumped from a river into this irrigation canal, which flows around the farmer's fields.

many dams, and they have done something else. They have dug many little rivers called *irrigation canals*. These little canals get their water from the big rivers and take it to many farms. This is done mainly along the Murray River and the rivers which flow into it.

These irrigation canals take water to crops and thirsty stock. They do not dry up in summer because they get water which has been stored up by the dams.

A Man Who Helped Everybody

Australian wheat farmers learned to fight drouths in another way. Their teacher was William James Farrer. He was born in England more than one hundred years ago. Farrer wanted to help people. He used to say, "I want to think that when I die my life has not been wasted."

As a young man Farrer went to Australia. In those days the Australian wheat farmers were having a hard time. Sometimes their crops were killed by drouth. Often, when rain did come, the wheat was spoiled by a sickness called *rust*. Some people said that Australia would never be a good country for wheat.

Several kinds of wheat were then grown in Australia.

Many modern farm machines are used in Australia. This combine harvester cuts and threshes the wheat.

AUSTRALIAN NEWS AND INFORMATION BUREAU



Most of them had been brought from England by settlers. Farrer thought, "These kinds of wheat came from damp England. Perhaps they are not the best kinds to grow in dry Australia." So he said, "Why not make new kinds of wheat which would grow well in this dry country?"

"What? Grow new kinds of wheat? Whoever heard of such a thing? It can't be done," some farmers said.

Yet Farrer said he would try. He bought a farm. He planted many different kinds of wheat. He got wheat from warm India, which would grow quickly. He got wheat from Canada, which would make good flour. At last, from many kinds of wheat he grew wheat of new kinds. No one had seen wheat quite like this before.

These new kinds of wheat were a wonderful gift to Australia. They grew quickly. They could be gathered sooner. They were less likely to be hurt by rust or drouth. They would grow on lands too dry for the old wheat. They made better flour. They were a great help to the farmers. And they helped to make Australia a great wheat country.

Farrer became famous. Men in other lands learned from him. They also learned to make new and better wheat. All this meant more wheat, more flour, and more food for the peoples of the world.

Farrer had a rich uncle in England. This man did not understand Farrer's great work. He wanted Farrer to stop growing wheat and go back to England. He wrote to Farrer saying, "Come back or I will not leave you my money when I die."

But Farrer loved working with his wheat. He was doing something useful. It was something that helped



The darkest areas on this map show where the greatest amount of wheat is grown in Australia.

everybody. So he wrote, "No, Uncle, I will not come back."

The uncle left the money to someone else, but Farrer did not mind. He did not care too much about money. He wanted something better. He wanted to help people. He used to say, "I want to think that when I die my life has not been wasted."

Rabbits, Rabbits, Rabbits

Farmers have friends like Farrer. They have enemies such as drouths. One of the worst enemies of the Australian farmer is the little brownny gray-rabbit.

Rabbits are not native Australian animals. There was no rabbit in Australia before the white men came. Early settlers took a few rabbits with them from England, and soon the trouble began.

Rabbits! How their numbers grew! Thousands of rabbits! Millions of rabbits! There seemed to be rabbits everywhere.

Rabbits eat grass needed for sheep and cattle. Ten rabbits eat as much grass as one sheep. There are millions

of rabbits in Australia. There could be many more sheep, and cattle also, but for these rabbits. We know what a nuisance drouths are in Australia. Drouths are worse because of the rabbits, for they eat up the scarce grass.

How many rabbits does Australia have? Nobody knows. In some years as many as a hundred million rabbits are shot or poisoned. Yet there seem to be as many left as ever.

Rabbits first became a pest in New South Wales. From there they spread right across the continent. Western Australia tried to keep them out by building a fence of wire netting. It reached from the Great Australian Bight north to the Timor Sea. It was one thousand miles long, the longest fence in the world.

However, it did not stop the rabbits. They dug under the fence, and they got through gates which people foolishly left open.

So the Australians built a second fence farther west. This did not stop the rabbits either. However, the two fences stopped some of the rabbits for a time, at least.

Rabbit meat is eaten in the cities. Rabbit fur is made into felt for hats and other things. The Australians sell millions of rabbit skins to the United States. They even sell some rabbits' paws to the Canadians—for luck! But these things do not make up for the harm done by rabbits to the farm lands of Australia.

Will They Save the Soil?

The Australian farmer has done many good things, but he has also made some mistakes. His worst mistake has been to harm his country's soil. Without soil there can be no pastures, no stock, and no crops.



AUSTRALIAN NEWS AND INFORMATION BUREAU

Australian farmers take good care of their rabbit fences.

The soil can be harmed in many ways. One way is to put too many sheep on a pasture. Too many sheep eat too much of the grass. Then what happens?

The grass holds the soil firm. When the grass is gone, the soil becomes loose. Along comes a wind. The loose soil is blown away. Farmers see their soil blowing away in clouds of dust.

When that happens, we call it *erosion*. The soil is *eroded*, or worn away. Sometimes wind carries the loose soil away. Often water does when it runs down a hillside.

Too many sheep on a piece of land can cause erosion. So can too many cattle, or rabbits, or certain crops. The soil gets weak and loose if too much is taken from it.

Erosion can make good lands into deserts. That has happened in our country. It is also happening in Australia.

Soil erosion can be beaten. The good lands can be saved. Let us hope Australia saves them before it is too late.

Sentences to Finish

Choose the right word to finish each sentence. On a piece of paper write down the number of each sentence and the word you have chosen. For example, after 1, write basins. (*Do not write in this book.*)

1. Water is sometimes found in huge underground ____.
bays basins breakers burrows
2. The water in those basins is called ____.
arctic artesian absent afloat
3. Men get this water by cutting small, deep holes called ____.
bites baths boxes bores

Something to Do by Yourself

On a large piece of wrapping paper draw a river flowing from some mountains and winding across plains to the sea. Draw a dam across the river in a valley, and then draw a man-made lake behind it. Put three groups of farms beside the river. Show irrigation canals taking water to the fields. Color the map to show blue water, green farm lands, and brown deserts.

THRILLS ON A SHEEP STATION

Ann and Wayne Greenwood were thrilled. This was their first morning at an Australian sheep station.

The station was owned by their uncle, Roy Stanton. The two young Americans had arrived the night before. They had been asked to stay for a whole month.

"I can promise you an interesting time," their uncle had said. But no one guessed how exciting it would be.

Ann and Wayne, who were twins, were eleven years old. Their home was in Seattle, Washington. They had come to Australia with their parents on a visit. Their parents were now staying with friends in Perth.

All their lives the twins had heard about Wandama, their uncle's station in Western Australia. They gave a shout of joy when they were told they could go there. "Oh boy!" cried Wayne. "Wait until we see those sheep dogs at work!" Wayne planned to be a farmer when he grew up.

"I want to see kangaroos jumping across the plains," Ann said. Ann hoped one day to write stories about animals.

And now here the twins were at Wandama sheep station. Their Australian cousin, Gavin Stanton, was showing them around.

The cousin was twelve years old, a few months older than the twins. He was fair, while they were dark. He

was a little taller. He had a quick smile, and he seemed to enjoy showing the young Americans over his station home.

Excitement in the Coolhouse

The pretty, one-story homestead was built of red bricks. All around it was a wide *veranda*, shady behind vines. A veranda is a long kind of porch. The twins had seen verandas on many Australian houses.

“Verandas keep the hot sunshine off the windows and walls,” said Gavin, “so they help to keep the houses cool.”

About fifty yards from the homestead were the huts where the station workers lived. About a dozen men worked all the year round on the station. Stables could be seen behind the huts. Next to the stables were a tool

A cattle station in Queensland. Notice the veranda, which goes all the way around the homestead.

AUSTRALIAN GEOGRAPHICAL SOCIETY



shed, a store, a garage, a blacksmith's shop, and a carpenter's shop. "Do you see that shed?" said Gavin, pointing to a long iron building. "That is where the sheep are sheared."

In front of the homestead was a garden with orange trees around it. Among the cool orange trees was a hut made of long, dry grass.

"The coolhouse," Gavin said. "We sit inside it on very hot days."

Water dripped down the grass sides of the hut and kept the inside cool. The water came from iron pipes along the roof.

"Let's go in," said Gavin. "But watch out for snakes. They like the coolhouse too."

He led the way into the coolhouse and the twins followed. It seemed rather dark at first after the bright sunshine outside. But in a moment they could see a couch, a small table, and three or four light chairs. Ann saw something on the couch. In the dim light it looked like a man's necktie. Then it moved.

"Look out! There's a snake!" Ann cried. She turned to run out of the coolhouse. The snake was frightened, too. It came sliding off the couch and made for the door as well. Wayne almost stepped on it. He jumped back with a yell.

Ann got out of the door first. Then came the snake. Then came Gavin, shouting, "Where's a stick?" The snake, which was more than a yard long, turned from the path and moved off through some grass. Wayne followed it at a safe distance.

Gavin rushed to the homestead, took a stick from the veranda, and came running back. Wayne showed him

where the snake had gone. "Good work!" Gavin cried. Then Gavin hit the snake a hard blow with the stick.

The snake seemed to spring forward into the air. Then it lay on the ground, moving slowly. Gavin hit it again. "That's done it," he panted, "I've broken its back."

The snake was dying. It moved for some time, as snakes do, before it lay still. Ann felt very sorry for it, but Gavin said that this was a very poisonous snake.

There were many snakes on the station, Gavin said. A stick was kept handy in every room of the homestead. There was also a stick in each corner of the veranda. We never get bitten," Gavin said with a smile. "Just watch where you're walking, that's all."

The twins were not used to snakes. They were a bit upset by their narrow escape. But Gavin said, "You did a good job, both of you. Ann was the first to see the snake, and Wayne did not let it get away."

Around the Homestead

The homestead and other buildings stood on a low hill. Below, across the plain, a line of trees followed the bends of a river bed.

"That's the Gascoyne River," said Gavin. "The river bed is dry now. But you ought to see it after heavy rain! Water rushes down the river bed and sweeps everything before it!"

Wayne grinned. "I hope that we do see it," he said. But somehow Ann felt worried. She had a feeling that something alarming might one day happen in that river.

She said nothing, and the three went on with their walk around the station buildings. They looked at the tennis court, and then Gavin led the way to the kitchen.

Here they met two aboriginal girls who were helping Sid, the cook. The girls wore cotton dresses, and their feet were bare. The young Americans smiled shy greetings.

The children had seen a few cows and goats grazing near the homestead. The station people made their own butter and grew their own vegetables. When they wanted meat, they killed a sheep.

"But what about things like flour and canned goods?" Ann asked.

Those things, Gavin told them, were bought at a store in Carnarvon, the nearest town. Carnarvon was 150 miles away. The bush mailman brought out goods of that kind in his truck each week.

The station also had its own store, a garage, and a landing field for airplanes. "Why, it's like a little town," Wayne said.

Most of all the twins wanted to see the horses. The young Americans were looking forward to a ride. So Gavin led the way to the stables.

A Fall from a Horse

It was here that they first met Alex. Alex was a stockman. His skin was as brown as leather. He gave the twins a wide smile and then lifted a saddle onto a tall, gray horse.

"This is Joker," said Alex. "He's a good horse. Gavin helped me break him in."

"Break him in?" asked Ann.

"Yes, train him for riding," said Alex. "Can you ride, Wayne?"

Wayne said that he could. Alex handed Joker's reins

to Wayne. "Like to ride Joker?" the stockman said. "Take care not to pull the reins as you get on."

Wayne climbed into the saddle. Up rose Joker, high on his hind legs. Down tumbled Wayne onto the ground. It was all over so quickly that Wayne hardly knew what had happened. As he picked himself up, he saw Alex take the reins. Joker stood still and snorted.

"Steady there, steady!" Alex told the horse. Then he smiled at Wayne. "I'm sorry," Alex said. "We thought Joker had given up that trick."

"Let's try again," said Wayne. This time Wayne did not pull the reins, and so he had no trouble.

They gave Ann a horse also, and the twins had their first ride. A few days later they were very proud when Alex nodded and said, "Those two are going to be good riders."

A Sheep Dog at Work

A few mornings later, Gavin's mother called the children from bed at dawn. The children were going *mustering*. "We call it 'mustering' when we round up the sheep," Mr. Stanton had said.

Once a year all the sheep on the station were mustered. The sheep were kept in different fields called *paddocks*. Mustering was always a big job at a station like Wandama. Some of the paddocks were fifty miles from the homestead.

Stockmen were already mustering in the far paddocks. The children would help in a paddock only a few miles from the house. The sheep would be mustered and driven back near the homestead to be sheared.

The three children rode off with Alex, the stockman.

But first they had a good laugh at Alex's black sheep dog Smacker. As they were putting saddles on their horses, Ann saw Smacker lying on the ground. The dog was on his back with his paws waving in the air. He was crying out as if asking for something.

"All right, Smacker, don't get excited. I'll get your boots," said Alex with a laugh.

"Boots? On a dog?" cried Ann and Wayne together.

"Yes," said Alex. "Smacker is going to do a lot of work today. He's going to run many miles. His feet get sore trotting over the hot ground. So he wears little boots of soft leather."

Stockmen like Alex, with their faithful dogs, are found in many parts of Australia.

AUSTRALIAN NATIONAL TRAVEL ASSOCIATION



Alex tied the boots on Smacker's feet. Then the stockman climbed on his horse and patted the saddle in front of him. "Come on, Smacker," he called. Smacker gave a little bark and jumped in front of his master. The dog rode on the front part of the saddle, leaning against Alex to keep his balance.

"Smacker loves to ride," said Alex.

They soon reached the paddock where they were going to muster. Two more stockmen, each with his dog, joined them. They rode off toward different corners to find sheep and drive them to the gate.

Alex and the three children set off for the top corner. On the way Ann gave an excited cry. About thirty kangaroos were going in big leaps across the paddock. "What a lovely sight!" Ann cried. And indeed it was. The big animals hardly seemed to touch the ground.

The party had seen no sheep yet. The grass was long, and there were many trees. Alex pushed Smacker off the saddle and said, "All right, Smacker. Go to work!" Off raced the sheep dog with a whine of joy. Sometimes he stood up on his hind legs to look above the grass. Soon Smacker found some sheep among the trees. The children, riding over, watched the dog at work.

With a paw in the air Smacker was looking at four sheep. The four sheep were looking at Smacker. Dog and sheep were quite still. Then the dog took a slow step forward. That was just enough to make the sheep turn and move off.

"Just what Smacker wanted," said Gavin. "He did not want to scare them too much. Sheep are hard to drive when once they're scared."

Smacker drove the four sheep toward several others.

Again the sheep bunched and faced him. Smacker stopped. He was quiet. He did not seem to be in a hurry. Then he put his paw forward again, slowly. The sheep turned and moved toward the distant gate.

Two of the sheep broke away and began to run. Off went Smacker, racing smoothly in a wide curve. The two sheep soon found that the black dog was in front of them. They stopped. Gently Smacker drove them back to the others.

It was nice to watch. Smacker always kept just the right distance from the sheep. He did not get close enough to scare them. Yet he was always close enough to make them go where he wanted them to go.

Sometimes a sheep or two ran toward the twins. Smacker waited while the twins drove them back. Ann and Wayne drove the sheep gently. They had learned from Smacker.

In time Alex, the children, and Smacker mustered a flock of five hundred sheep. Dust rose from hundreds of little hoofs.

All through the hot June day the mustering went on. At the paddock gate many more sheep were waiting. They had been mustered by the other stockmen. Alex opened the gate and stood near, ready to count the sheep as they passed through.

The sheep, however, stood in front of the open gate and would not move. The men shouted. A stockman cracked his long whip. The sheep only bunched tighter together. For no reason they refused to go through that gate.

"Watch Smacker," said Gavin.

The twins saw Alex wave his arm. At this signal the



AUSTRALIAN NEWS AND INFORMATION BUREAU

A dog show in Australia. This sheep dog is showing how well he can drive sheep through a gate.

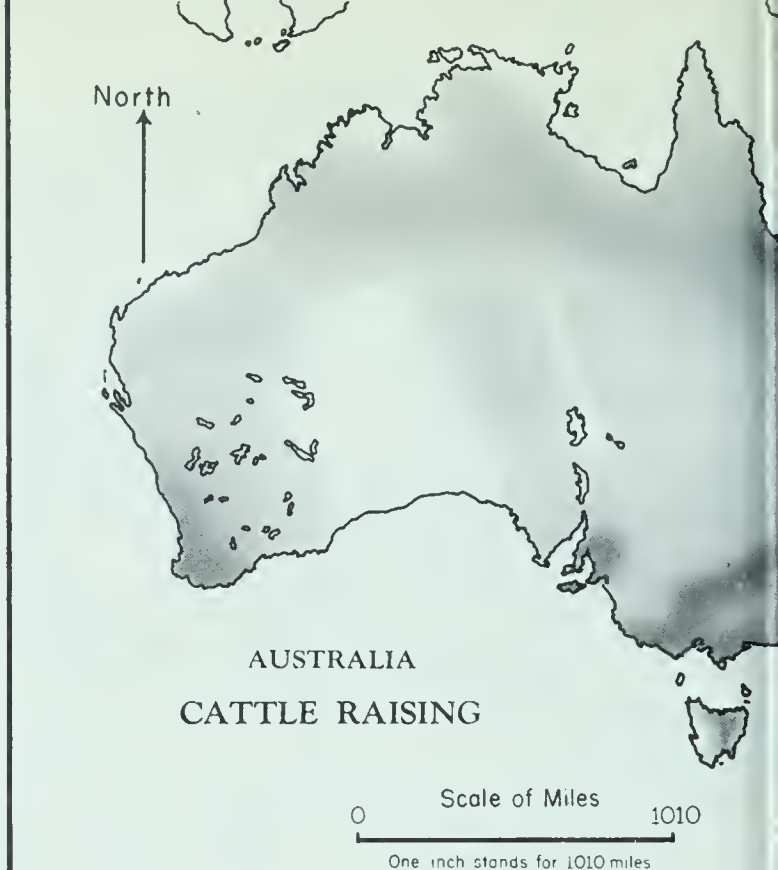
sheep dog sprang into action. He jumped onto the backs of the sheep. He ran right across the flock toward the gate. Then he dropped to the ground, ducked behind the leading sheep, and bit it sharply on the hind leg.

In surprise the sheep sprang forward. First it jumped high in the air as if leaping a log. Then it dashed through the open gate. The others followed. Almost every sheep jumped where the leader had jumped.

“Just look at those sheep,” said Alex, shaking his head. “All jumping just because the first one did. Did you ever see such silly animals!”

“No,” said Wayne. “But what a wonderful dog!”

It was dark when they all reached the homestead. The sheep and lambs were put into a small paddock, and the day’s work was done.



The darkest areas on these maps show where the greatest number of sheep and cattle are raised in Australia.

Cutting Off the Wool

All was noise and hurry at the station two days later. Thousands of sheep had been mustered. Now they were being sheared by a team of shearers. These teams travel from station to station. One team had arrived at Wandama, and the men were already at work in the shearing shed.

Ann and Wayne stood by a shearer and watched him work. He took hold of a sheep and held it between his feet. It lay quiet as he moved the electric shears across its body. The shears looked like barbers' shears but were much larger.

As the wool came off, it piled up on the clean floor. Wool that has been cut off a sheep is called *fleece*. The twins saw that the outside of the fleece was dirty, but the inside was as white as milk.

As soon as the shearer finished, he pushed the sheep

through a little door behind him. The door led into a paddock outside. The sheep, which had been big and gray, was now small and white. It had lost its woolly topcoat, four inches thick.

In the shed a boy picked up the fleece and ran with it to some tables. Here the fleece was looked at with care. Good wool was put into one sack. Wool which was not so good went into another sack. Thus it was separated into different grades. Good wool is wool that will make good cloth.

The wool in each sack was pressed down tight by a machine. Then the sack was sewed up. It was now called a *bale*. Each bale was marked "Wandama." Each bale also had a mark showing the grade of wool inside.

Outside the shed the bales were loaded on big trucks, which would take them to Carnarvon. From there they would go by ship to Fremantle, a port near Perth.

"Once a year men come to Australia to buy wool," said Mr. Stanton. "They come from the United States and other countries. They buy the wool at sales held in the Australian cities. Then the wool is sent to their countries, where it is made into cloth."

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INFORMATION BUREAU

With electric shears, this man can shear more than one hundred fifty sheep a day.



The River Comes Down

Early one morning about two weeks later Gavin and Wayne went off on a long ride. Gavin was taking Wayne to visit a stockman who lived in a distant hut.

Ann did not go. She stayed at the homestead. Later she was glad about that, for she saw the river come down in flood.

It was a cloudy morning at Wandama. It was not raining, but heavy rain had fallen farther inland. Many miles away the rain water poured into the dry river bed, and the river began to flow. The people at Wandama did not know that when the boys left on their ride. At ten o'clock in the morning the telephone bell rang. It was a call from the people at another homestead up the river. "Look out," they warned. "The river is coming!"

"The river is coming," Mrs. Stanton said as she came from the telephone. Then she went back to the telephone and called up another station nearer Carnarvon. "The river is coming!" she cried.

Back she hurried to Ann. "The water is eighteen miles away now," she said. "It travels down the river bed at



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*This stream dries up only
during the driest years.*



AUSTRALIAN NEWS AND INFORMATION BUREAU

This river is almost dry during the dry season, but in the rainy season it is sometimes forty feet deep.

three miles an hour. That means it will be here about four o'clock this afternoon. Before the boys come back."

At Wandama everyone got busy. The chickens were chased out of the dry river bed and driven into a chicken pen on high land. Now they would be safe when the river came down.

Mr. Stanton and Alex rode off along the river bed. They chased away any sheep and cattle that they saw. Sometimes animals were drowned when the river came down.

"What about Wayne and Gavin?" asked Ann. "Will they be in any danger?"

Mrs. Stanton shook her head. "I don't think so," she said. "Gavin knows his way about. He knows enough to camp overnight if it is dangerous to come back."

Toward four o'clock the station people waited by the

riverbank. Soon the water came round the bend. It was a sight Ann would never forget.

The water came down like a low, moving cliff about three feet high. On top of the water a small log bobbed, crowded with ants and beetles. A dry branch stuck out, and around it was curled a frightened snake. A dead sheep turned slowly, first this way and then that, as the water carried it along.

Now a river, twenty feet wide, flowed over what had been dry sand. As Ann watched, the river got wider and deeper. Later the water spilled over the riverbanks. It began to flood the low paddocks around the station buildings.

A Narrow Escape

The boys were riding home in the dark. They did not know that the river had come down. Suddenly Gavin stopped his horse. "Listen," he said.

In the distance was a sound like many voices. "What is that?" asked Wayne, puzzled.

"Frogs," said Gavin. "Hundreds of frogs. The river must have come down." He explained that the frogs lay quiet in holes when the river was dry, but they came out when water flowed in the river bed.

The young Australian had seen the river come down in other years, but he had always been safe at the homestead. This was the first time he had been on the far side of the flowing river.

The boys rode on. Soon their horses were splashing through wide pools. The ground here had been flooded inches deep by water from the river. The cries of the frogs grew louder.

Wayne turned in his saddle and looked all around him. It was too dark to see far. There seemed to be water everywhere. "Where is the river?" he called.

"Just ahead," cried Gavin. In a moment Wayne saw trees before him. They were the trees that grew along the riverbank. Wayne stopped his horse beside his friend. In front of the boys the river flowed, black and dangerous in the night.

"We're having ice cream and cake for dinner tonight. Let's swim our horses across," said Gavin. "The river's not wide here."

It was not wide, but it was deep and flowing fast. The boys could hear the water bubbling and rushing. The frogs were crying loudly in many tones.

"Here goes!" said Gavin. He whipped his horse forward. The animal plunged into the flowing black water. With Gavin firmly in the saddle the horse swam strongly for the other bank.

Wayne was riding Joker, who stood and trembled. Joker was more frightened than the other horse. Wayne had to hit him twice. Then Joker plunged in with a snort of fright. His wild spring almost threw Wayne off his back.

From the other bank came a cheerful shout. Gavin was across and safe. Wayne shouted back, but the rushing water was taking Joker down the stream. The horse almost fell many times, but got his footing again. At last Joker reached the other side of the river. He stumbled up the bank carrying Wayne, who was badly frightened.

"I was afraid you were going down the stream," said Gavin. "I guess we shouldn't have tried to cross the river. Father will be angry when he hears about it."

Mr. Stanton did not seem to be angry, for he was very glad that the boys were safe. But he did say quietly to Gavin, "That was a very reckless thing to do. You know you should have camped on high ground until morning. From now on I want you to set a better example to Wayne about how to take care of yourself in this country."

Today, in their Seattle home, Ann and Wayne love to tell of their visit to Australia. They often write to Gavin, who is coming to see them someday. Wayne hopes to have his own farm then. He will enjoy showing Gavin over it. And Ann? She has just had her first story printed in a magazine. The story is called *Wandama*.

Questions the Maps Will Help You Answer

Find the names mentioned in this chapter. Decide where Wandama station would be. (You can learn that from the section "Around the Homestead.") From other maps in this book, find the answers to these questions:

1. How much rain would fall on Wandama in an average year?
2. Does the Gascoyne River always flow?
3. What is the main kind of tree in that area?
4. Is wheat grown there?

Something to Do

Make a model showing the homestead, shearing shed, and other buildings at Wandama. Show also the dry river bed, trees, tennis court, and coolhouse. If you do not have a sand table, you could draw a plan on a large piece of wrapping paper. Glue small models of the buildings and other things upon it.

THE STORY OF AUSTRALIA'S GOLD

What stories are told about gold! For thousands of years gold has been a valuable thing. Gold makes people rich. Gold gives some men power. Millions of people have believed that gold would make them happy. So men have fought for gold. They have robbed and killed for it. They have crossed oceans and deserts in search of it.

Sometimes gold is found on the ground or near the top of the ground. Sometimes it is found in streams. Sometimes it lies in rocks deep under the ground. Men dig deep mines in the earth to get the gold. When gold is discovered in a new place, hundreds of people rush there to look for more. That is a *gold rush*. A place where much gold is found is a *gold field*. Some of the most exciting gold rushes in the world have been to gold fields in Australia.

The Story of Edward Hargraves

In 1849 Edward Hargraves, a young farmer in New South Wales, heard exciting news. Gold had been found in California! Thousands of people were rushing to the California gold fields hoping to find more gold. Hargraves cried, "I'm off to California!"

He went in a ship across the Pacific Ocean to America. In the Sacramento Valley in California many gold seekers were wading in streams and digging in the

ground in their search for gold. Hargraves joined them.

While digging for gold, he sometimes stopped and looked at the hills around him. They were brown hills with not many trees. They were rather like some hills near Bathurst in New South Wales.

"Gold is found here in California, in this kind of country," he said to himself. "So perhaps there is gold in the same kind of country back home. Perhaps there is gold in the hills around Bathurst."

One day he said, "I'm going home. I know some hills in Australia where I might find gold."

Back Hargraves went to Australia. In Sydney he told some people what he wanted to do. "I'm going to look for gold in the hills near Bathurst," he said.

"You are a fool," they told him. "There is no gold in Australia. You would be silly to go looking for it."

However, Hargraves had made up his mind. One spring morning he got on a horse and rode out of Sydney. He was on his way to the hills near Bathurst to look for gold. He set off inland, taking the Blue Mountains road. It was the road the convicts had made less than forty years before. Hargraves spent the night in a little stone inn, and the next morning he was on his way again.

In a day or two he had left the Blue Mountains behind him and was crossing the Bathurst plains. Ahead he could see some brown hills without many trees. They were the hills he was looking for, the hills in which he hoped to find gold.

Soon he was riding into a valley. As he looked about him, Hargraves thought, "How wonderful it would be if I were to find gold here! It would be a fine thing for



AUSTRALIAN NEWS AND INFORMATION BUREAU

Two miners washing gravel in hopes of finding gold.

Australia. It would bring many people to this young country. It would help Australia grow into a nation.”

Later Hargraves came to a little stream. He stopped while his horse had a drink. The water flowed fresh and cool over brown sand. This stream was like one which Hargraves had seen in California.

Quickly he got off his horse and bent down beside the running water. He put his hand into the water and took some wet sand from the bottom. Was there gold here?

Hargraves looked very hard at the sand on his palm. The sand was light brown, almost yellow, in color. Some of the grains were yellow. Could they be tiny grains of gold?

It was possible. Sometimes tiny bits of gold look much like yellow sand. A great feeling of hope made his heart beat fast. His eyes shone. He took a long, deep breath.

But he did not know. He was not sure. Those tiny yellow grains might be only sand after all. He had seen men mistake sand for gold before. How could he be sure?

Hargraves knew the answer. There was a way to find out whether those tiny yellow grains were gold. He had learned that way in California.

He took some more sand from the bed of the creek. He put the sand into a tin pan. Next he put some water from the creek into the pan. Then he rocked the dish from side to side. He did this very gently. Each time he made sure that a little water splashed over the edge of the pan. Each time some water splashed out, a little sand splashed out also.

If there were gold in the dish, it would not splash out. Gold is heavier than sand. Thus, grains of gold would not splash out with water as the sand did. Gold would stay in the pan.

Hargraves kept rocking the pan. At last all the water and much sand had been splashed out. And yet something was left. Still in the pan were a few tiny grains.

Hargraves hardly dared to breathe. He tipped those

tiny grains into his hand. They were yellow. They were heavy. They were gold! Up and down the valley his shouts rang. Gold in Australia!

The First Gold Rushes

Gold in Australia! The news spread. It was thrilling news. Everybody knew how exciting the gold rush had been in California. Now perhaps there would be a gold rush in Australia, too. In Sydney people gathered in the streets. They talked about the discovery of gold near Bathurst.

“Hear about Hargraves?”

“He’s the man who found the gold.”

“He’ll be rich, they say.”

“Good-bye, I’m off to look for gold.”

“Me too!”

Soon there were dozens of men seeking gold in the hills near Bathurst. Many found small amounts of gold. They took it to a bank and changed it for money.

Then came more news. Gold had been found in the south, in Victoria. A lot of gold had been found there, far more than in the Bathurst hills. People were picking up lumps of gold off the ground. Everyone was wild with excitement. Wonderful stories were told of lucky gold finds. A rough lump of gold is called a *nugget*. One man picked up a nugget that weighed 210 pounds. It was sold for \$47,000. Everyone thought, “Perhaps I can find a nugget like that!”

The places in Victoria where most gold was being found were Ballarat and Bendigo. You can find them on the map on page 176.

All over Australia men left their work and hurried to



the Victoria gold fields. Farm workers left their cattle and sheep and crops. Storekeepers closed their stores. Street cleaners threw away their brooms. Teachers walked out of their schools. Policemen left their posts. All hoped to find nuggets in the gold fields of Victoria.

Gold in Australia! The news spread to other countries. People began rushing to Australia. Thousands traveled on American sailing ships called *clippers*. In those days the clippers were the fastest ships on the seas.

What a difference the discovery of gold made to the young colonies of Victoria and New South Wales! In 1849 there were only 400,000 white people in Australia. In 1859 there were more than 1,000,000. Sixty thousand people were rushing each year to that distant country, Australia, which was so little known.

Most of the gold found in those exciting days lay a little way under the ground. It had to be dug up. So gold seekers were called *diggers*. They dug for gold.

Each digger took a piece of ground to work on. It was twelve feet long and twelve feet wide. He called that piece of ground his *claim*. Often several diggers worked together as partners. The work was easier if they helped one another. Friends shared their claims. They shared the work. They shared the gold that they found.

A digger called his friend his *mate*. The diggers said, "A good man stands by his mate. He always helps his mate in times of trouble."

A Victoria gold field of those days was a lively place. Suppose we had been at Ballarat. We would have seen many men working near a stream between low hills. Some of the men are digging deep holes. Others are washing the soil which has been dug up. Like Hargraves they are using water to wash the sand away, leaving the gold behind.

Here and there we see the tents and rough huts of the diggers. Their wives and children also live in these tents and huts. What fun for the children to go wandering over these hills, looking for nuggets!

Most of the diggers came from the British Isles, but among them were men from America, China, Italy, and other lands. Many of them were fine people. They were

men who believe in being fair with everyone. They said, "We are all mates together."

Those were happy days in the Victoria gold fields, but the good times did not last. In the year 1854 there was trouble. The trouble was between the diggers and the men who made the laws. The men who make the laws for a state or a nation are called its *government*. Angry diggers rose in arms against the government of Victoria.

The Eureka Stockade

When the diggers rose in arms, a small battle took place near Ballarat. This battle is famous in Australia. It became known as the fight of the Eureka Stockade.

Why did the diggers rise against the government? The government was not fair to the diggers. It tried to make them pay a heavy tax. Many diggers could not afford to pay this tax. The government treated the diggers badly in other ways as well. Free men like to help choose their own government. They do this by voting. Free men should have the right to vote. But the government of Victoria did not give the diggers this right. Indeed, the government treated the diggers in much the same way as King George the Third and his government had once treated the American people.

When diggers did not pay the tax, the government sent the police to the gold fields. Sad to say, some of these police officers were bad men. Sometimes they put bayonets on their guns and chased after the diggers. They tied some of the diggers to logs with chains.

At last the diggers could stand this no longer. They said, "We will not obey this government." They got guns

and pistols. They made spears for themselves. They chose Peter Lalor, a tall Irishman, to be their leader.

The diggers also made themselves a flag. It was a blue flag with five white stars upon it. The stars were named for five real stars which can be seen in the sky above Australia. These stars are called the Southern Cross.

One afternoon the diggers gathered to hold a meeting. Peter Lalor climbed upon the stump of a tree. He looked down at the troubled, bearded faces of the diggers. Thousands of them waited to hear what he would say.

“We must stand by our mates,” a digger shouted.

This copy of Ballarat during the gold rush was made for a movie telling the story of the Eureka Stockade.

AUSTRALIAN NEWS AND INFORMATION BUREAU



Peter raised his hand. There was silence. Not a man spoke. Not a whisper could be heard. All eyes were turned on Peter as he took off his hat. He knelt. He looked up at the flag, which was flying from a high pole. Then he spoke words which have never been forgotten in Australia.

“We swear by the Southern Cross,” he said, “to stand truly by each other and fight to defend our rights and liberties.”

“Amen,” the diggers answered. Each digger raised his right hand toward the flag as he took the vow.

The diggers knew that the government of Victoria would send soldiers and police against them. They quickly got ready for a fight. Near their camp they built a rough fence called a *stockade*. It was built around a space of land known as the Eureka. The diggers gathered inside this fence. They would use it as a fort when the soldiers came. This was the Eureka Stockade.

The soldiers did not come at once. Two evenings later most of the diggers left the stockade. They went back to their tents. They did not think there would be a fight the next day, which was Sunday.

Saturday night was dark and cold. Midnight came and went. Within the stockade about one hundred and fifty diggers slept. A few were awake, watching out for the soldiers.

Toward dawn a digger heard faint noises. “Who goes there?” he called. Men were moving out there in the darkness. Who was it? It was soldiers and police. There were more than six hundred of them. Suddenly in the darkness they charged the stockade!

Not all the diggers had guns to fight with. Those who

had guns fired at the charging men. A few soldiers fell, but the others came on. They seemed to come from all directions. Soon they were over the stockade fence.

The battle was wild. Shots, cries, and groans sounded in the darkness. The diggers fought bravely, but the soldiers were many, and the diggers were few. Peter Lalor fell wounded. Some of the finest diggers were killed. The soldiers won.

The soldiers took many prisoners. They set fire to the diggers' tents. They dragged down the flag with the five stars. The diggers had lost the fight at the Eureka Stockade. That was how it seemed on that sad Sunday morning.

Then a new thing happened. The people of Australia, hearing about the fight, grew angry. They were angry with the government of Victoria. They were so angry that they told the government that it must change the laws.

The government did. It made things far better for the diggers. They no longer had to pay the heavy tax. More people were given the right to vote. Peter Lalor, leader of the diggers, got many votes and became one of the lawmakers of Victoria.

Good people are worth more than any amount of gold. Those diggers were worth more to Australia than all the gold they found. Australia is a happier place today because the diggers fought for freedom. So Australians remember the diggers with love. Even today Australians sometimes repeat what was said a hundred years ago at Eureka—

“We swear to stand truly by each other and fight to defend our rights and liberties.”



AUSTRALIAN NATIONAL PUBLICITY ASSOCIATION

The Golden Mile at Kalgoorlie. The white hill is made of waste earth that has been taken from the mine.

A Gold Field of Today

The diggers have gone, but the holes they dug can still be seen in the old Australian gold fields. One can find old gold fields in many parts of Australia, for gold was found in every state.

The diggers have gone. Yet the exciting story of Australia's gold is not ended. It is now quite a different story. Today gold is dug up from mines that reach deep into the earth. The men who work far under the ground are gold miners. They work for wages. They do not own

the gold which they dig up. Their work and their lives are very different from those of the diggers of days gone by. Later we shall go down into a gold mine and watch the miners at work.

The richest gold fields in Australia today are on the inland plains of Western Australia. Gold was found there in 1892, and a gold rush took place. It was just as exciting as the gold rushes had been in Victoria forty years before.

Today the old tents and huts have gone like the diggers. A town called Kalgoorlie has been built on the western plains. About 15,000 people live in that far-inland town. It is only a small town, but it is known all over the world because of the gold which is found there. Find Kalgoorlie on the map on page 176.

Kalgoorlie depends on gold. It would fade away if no more gold were found there. If there were no more gold, the mines would not be working. The miners would go to some other place and perhaps earn their living in a different way. Stores would close because there would be too few people to buy goods. Streetcars would stop running because they had too few passengers. Almost everybody would go away. Almost every house would be empty.

Most people go to Kalgoorlie by train from Perth, the capital of Western Australia. Perth, near the sea, lies in good green country. The train leaves Perth in the evening and heads inland. It reaches Kalgoorlie at lunch-time the next day. During the night the green country has been left behind. In the morning the train comes to the hot, dry inland plains that spread over so much of the Australian continent.

Now the train passes through miles and miles of the small mallee gum trees, which grow in the dry places. Low, gray bushes grow in the red soil between the trees. The sky seems to cover the world like a huge, blue bowl. A hot, dusty wind blows from the desert in the east. You see no green grass, no river, no lake. Farms are fewer and fewer as the train goes inland.

About noon you see a bare, gray hill. It seems high because the ground around it is so flat. Near the hill you see tall chimneys and some high iron buildings. "Gold mines," people on the train exclaim. The train is arriving at Kalgoorlie.

Here in Kalgoorlie is the Golden Mile. This is a famous space of ground a mile long and a mile wide. In this area are some of the richest gold mines in the world. Gold worth hundreds of millions of dollars has been brought out of the deep mines found in the Golden Mile.

Some of that bare, gray hill seen from the train was made of earth brought up from the mines. The gold has been taken out, and the earth has been thrown away. It has been piled up in a heap until it has become a hill.

There is one thing about Kalgoorlie which may puzzle you. Fifteen thousand people use a lot of water every day. They need water for drinking and washing. They need water for gardens and lawns. Kalgoorlie even has a swimming pool. Yet this is a city on a dry plain. There is no river near.

The water comes from a man-made lake in the hills near Perth, nearly four hundred miles away. It is pumped all the way to Kalgoorlie through pipes which are big enough for a person to crawl through.

Water is as valuable as gold to the people of Kalgoorlie. They could not live without it. So water is taken to Kalgoorlie, while gold is dug up to be sent away and sold.

Down in a Gold Mine

The most exciting things in Kalgoorlie are the gold mines. They go deep down into the earth. It is surprising how far down they go.

Suppose we could go to Kalgoorlie. Maybe we would find a friend who works in a mine. Something like this might happen:

“Do you want to go down in a mine?” our friend asks.

“Yes. How exciting!”

“It certainly is,” he says. “Come with me.”

Our friend takes us to a group of buildings on the Golden Mile. These buildings are the top part of a mine. We are given some old clothes to put on. It is dusty down in the mine when the men are working.

“Now we shall go down,” says our friend.

“How?”

AUSTRALIAN NEWS AND
INFORMATION BUREAU

*Kalgoorlie miners waiting
for a cage to take them to
work far below ground.*



"In a cage," he says with a smile.

He takes us to an elevator. It is much like elevators in tall buildings. But this one goes down a hole in the ground like a big deep well.

"We call this elevator the *cage*," he says. "In we go. Mind the step."

Several miners get into the cage with us. They wear steel hats. Sometimes earth and rock fall down on miners, hurting or even killing them. This does not happen often, but the miners wear steel hats which may save their heads from being hit.

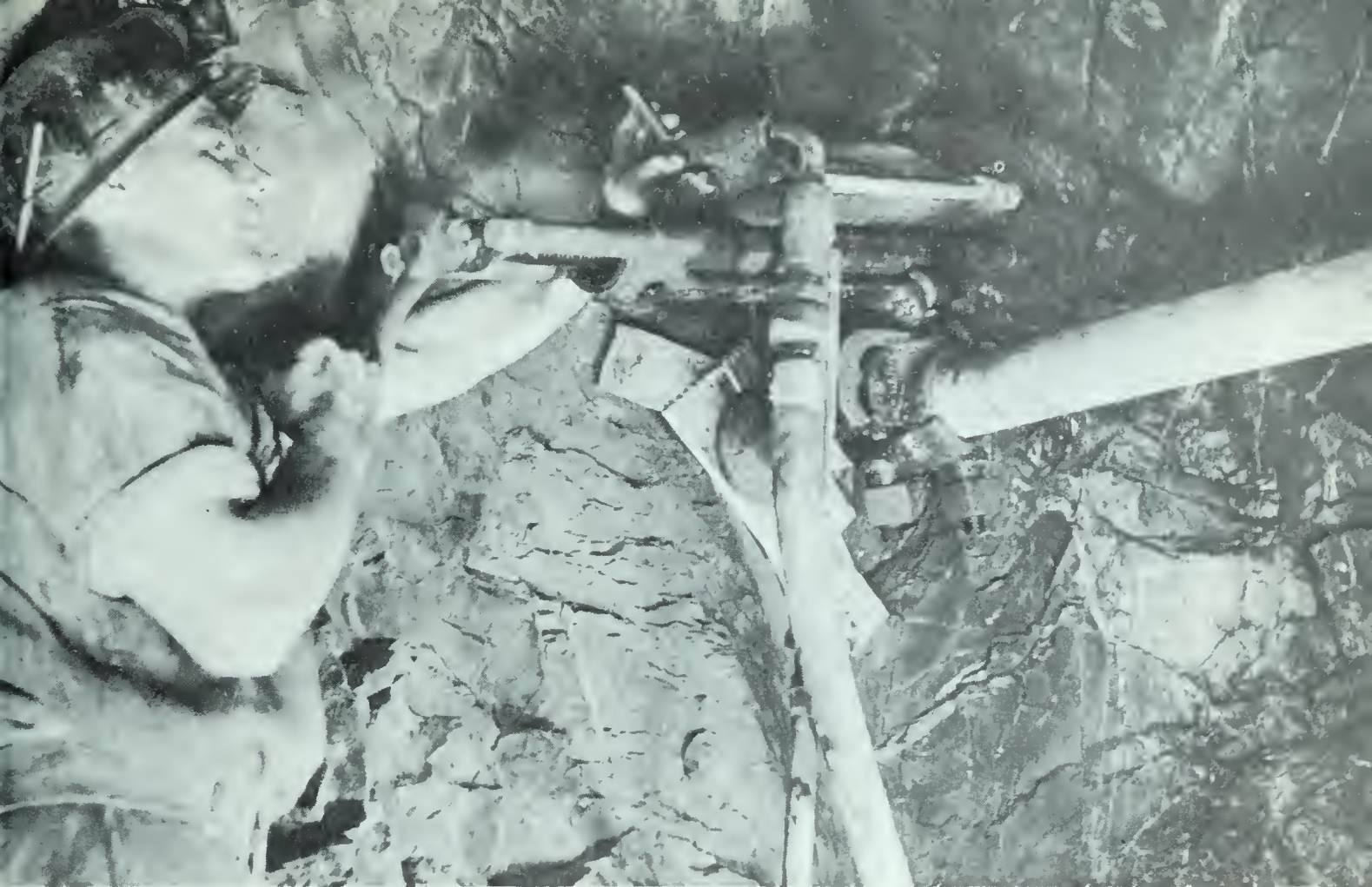
The iron door closes behind us. A bell rings. Down we go, leaving the daylight and the sunshine behind.

On its downward journey the cage stops several times to let men out. It is like an elevator stopping at different floors in a building. We go a long way down, and now we are the only ones left in the cage. It stops, and the door slides open. We step into a rocky room like a big cave.

"Fourteen hundred feet under the ground," our friend says. "Now we will take a little walk. But first I shall send the cage back." He presses a button, a bell rings, and the cage goes up like an elevator. We are left behind, almost at the bottom of the mine.

On the far side of the rocky room is the mouth of a tunnel. Our friend sets off along this tunnel, and we follow him. Lights shine above us, and at our feet are two steel rails. They look like the rails of a railroad track. Could this be possible, fourteen hundred feet under the ground?

We do not have time to ask. Something is coming along the tunnel towards us. Railroad cars!



AUSTRALIAN NEWS AND INFORMATION BUREAU

A miner is drilling and blasting out gold-bearing ore.

“Stand against the wall!” our friend says.

We press ourselves against the tunnel wall while small railroad trucks roll past. They are filled with earth and rock. The trucks are being pushed along by two miners who have their heads down. However, they see us. “Hello, kids,” they call in surprise. Then they are gone.

“In some of the mines there are electric trains,” says our friend.

We go on walking along the tunnel. Now and then we pass black openings in the tunnel wall. These are more tunnels, leading to the left and to the right.

“Yes,” says our friend, “and there are many more tunnels in this mine. There are tunnels above us and tunnels below us. Miles of tunnels have been dug to get out the rich earth.”

We have now walked for about three hundred yards. We hear noise ahead. Bang-bang-bang-bang! It sounds

like a machine gun. The noise gets very loud as we draw near. Dust fills the air.

Bang-bang-bang! We can hardly hear ourselves speak.

In the dim light we see two miners at work. One is using a machine. It is this machine that is making such a noise. He is using it to cut holes in the rocky wall at the end of the tunnel. The other miner has a shovel. At his feet lies loose, rocky earth which has been broken from the tunnel wall. With his shovel he is putting this earth into a small railroad car.

There are no electric lights here at the end of the tunnel. The miners have small lamps hooked onto their hats. Dust is everywhere, and the men cough as they work. By and by they see us. They stop the machine, and the tunnel is suddenly quiet.

"Hello," says the man with the shovel. "Where did you kids come from?"

"From America," says our friend. "I bet you didn't expect to see them down here."

They smile at us in a friendly way. One of them picks up a small rock. He holds it for us to see in the light of his lamp. We look at it with care. In the rock we see a tiny, thin line of yellow.

"Gold," he says.

He tosses the rock lightly into the car. When full, the car will be pushed to the cage. The cage will lift it to the top of the mine. Up there the rocks will be crushed and the gold will be taken out.

It is time for us to go. We thank the miners for showing us the gold. As we walk back along the tunnel, the bang-bang-bang-bang begins again. We are glad to get away from the clatter.

EWING GALLOWAY

This gold nugget, found at Ballarat, was sold for over ten thousand dollars.



“Do miners like working in all that noise and dust?” we ask our friend.

“Not much,” he says. “The dust is bad for them. It gets into their lungs. It makes some of them very ill.”

“Then why do they work in a mine?” we ask.

“They do it to get money,” he says. “They need money to pay for food, clothes, and a home for themselves and their families.”

The cage comes down for us, and we get in. Up goes the cage. It is like going up to the top of the tallest building in the world.

At last we stop. The cage door opens, and we step out. We blink our eyes in the bright daylight. The air is clear and fresh.

What Happens to the Gold

In this chapter we have read the story of Australia's gold. We have seen how gold brought many people to Australia. The diggers fought for freedom at Eureka, and this helped Australia grow to be a nation. We have also seen how gold has made a city in the dry plains in

the far west. We know that even as we read these words there are men working far under the ground in the gold mines of Kalgoorlie.

Australia is not the only country that produces gold. The country which mines the most gold is the Union of South Africa. Gold is also mined in the United States, the Soviet Union, and other countries.

What does Australia do with its gold? It sells it. Most of Australia's gold is bought by the United States. Australia gets dollars for this gold, and uses these dollars to buy tools, movies, automobiles, and other things.

Why does the United States buy gold? Well, gold can always be changed into money, so it is a good thing for a nation to have.

Do you know anybody with a gold tiepin? That gold may once have been mixed up with rock, hundreds of feet down in a gold mine in Kalgoorlie.

Sentences to Finish

Here is a game of Cause and Effect. Four causes are given. Then, in a different order, are four effects. Write down the causes on paper and add the right effect to each.

Cause

1. Gold was found in Western Australia,
2. Not much water is found near Kalgoorlie,
3. Sometimes there are falls of rock in the mines,
4. Gold can be changed into money,

Effects

1. so men still go seeking gold.
2. so the miners wear strong, steel hats.
3. so the town of Kalgoorlie grew there.
4. so water is brought to the town in pipes.

AUSTRALIANS AT WORK

Some people go to work by train. Some go to work by ferryboat. Some go to work on streetcars. But when Jackie Brown's father goes to work, he climbs a tree!

Why does he do that? We shall see in just a moment. First let us meet Jackie's father. Who is he? How does he earn his living?

Jackie's father is a *forester*, or a man who takes care of forests. This, he says, is a grand job. He loves trees for their strength and beauty. He is happy taking care of the forest giants.

He has many things to do, and some of them are thrilling. One task is to watch out for forest fires, or *bush fires*, as they are called in Australia.

If you want to fight a bush fire—and win—there are certain things that you must do. The most important thing is this. Catch your fire early! Fight it when it is small. Fight it before it becomes a danger. Kill it before it grows into a monster of smoke and flame.

Yes, catch it early! But how? A fire might start anywhere in the forest. Lightning could start a bush fire. So could sparks from a railroad engine. Who is to know whether a fire is starting somewhere out in the bush?

Now we can see why Jackie's father climbs the tree. He goes up there to watch for bush fires. The tree that he climbs is one of the tallest of the forest giants. It is



AUSTRALIAN GEOGRAPHICAL SOCIETY

A lookout cabin just like the one Jackie's father uses.

as high as a sixteen-story building. Jackie's father has built a cabin right at the top of the tree. From this cabin he can see over the forest for many miles.

He looks over the forest roof of leaves and branches. Miles away something moves, like a mist in the treetops. Smoke! A bush fire! Jackie's father springs to a telephone in the cabin and cries a warning. In a town near by some fire fighters are ready. In a moment trucks carrying men, water, and hoses are racing to put the fire out.

How does Jackie's father get up to his cabin? He climbs a kind of ladder that he has made on the tree trunk. You can see his cabin and ladder in the picture on page 192.

Australian forests are beautiful. But there are not so many forests in Australia as in other continents. You see, forests grow in areas which get a lot of rain, and there are not many areas like that in dry Australia. The map on page 126 shows where the Australian forests are.

Jackie's father lives in the southwest corner of Australia. Here grow the *karri* trees, the tallest of all gum trees except the *mountain ash* which grows in the state of Victoria.

Trees can be divided into two main kinds—*hardwoods* and *softwoods*. Nearly all of Australia's forest giants are gum trees, which are hardwoods. The wood is hard to cut and is heavy and strong. It is used for railroad ties and in the building of fences, bridges, and houses. It is also made into beautiful furniture.

Jackie's father has a grand job, taking care of forest giants. But what about Jackie? We have not said much about him. Well, Jackie is twelve years old. He has red hair. He lives at Pemberton, in the heart of a West-

Australian forest. And he says, "When I grow up, I'm going to be a forester too, like father."

Friendly Farmers

Australians, like all people, have to work for their living. We have already met some of them. We have just read about Jackie Brown's father, a forester. In earlier chapters we came upon stockmen, shearers, gold miners, and other Australians at work.

Now let us meet some more. How about the farmers? There are many farmers in Australia. They are much like our farmer friends in the United States. They grow crops and raise animals. They milk cows and gather eggs. They get up at sunrise and work until dark. They are kind and friendly, just like the people in our farming lands.

Suppose we visit an Australian farm on a fresh winter morning. We shall meet Dave Shull, a farmer's son.

A Farmer's Son

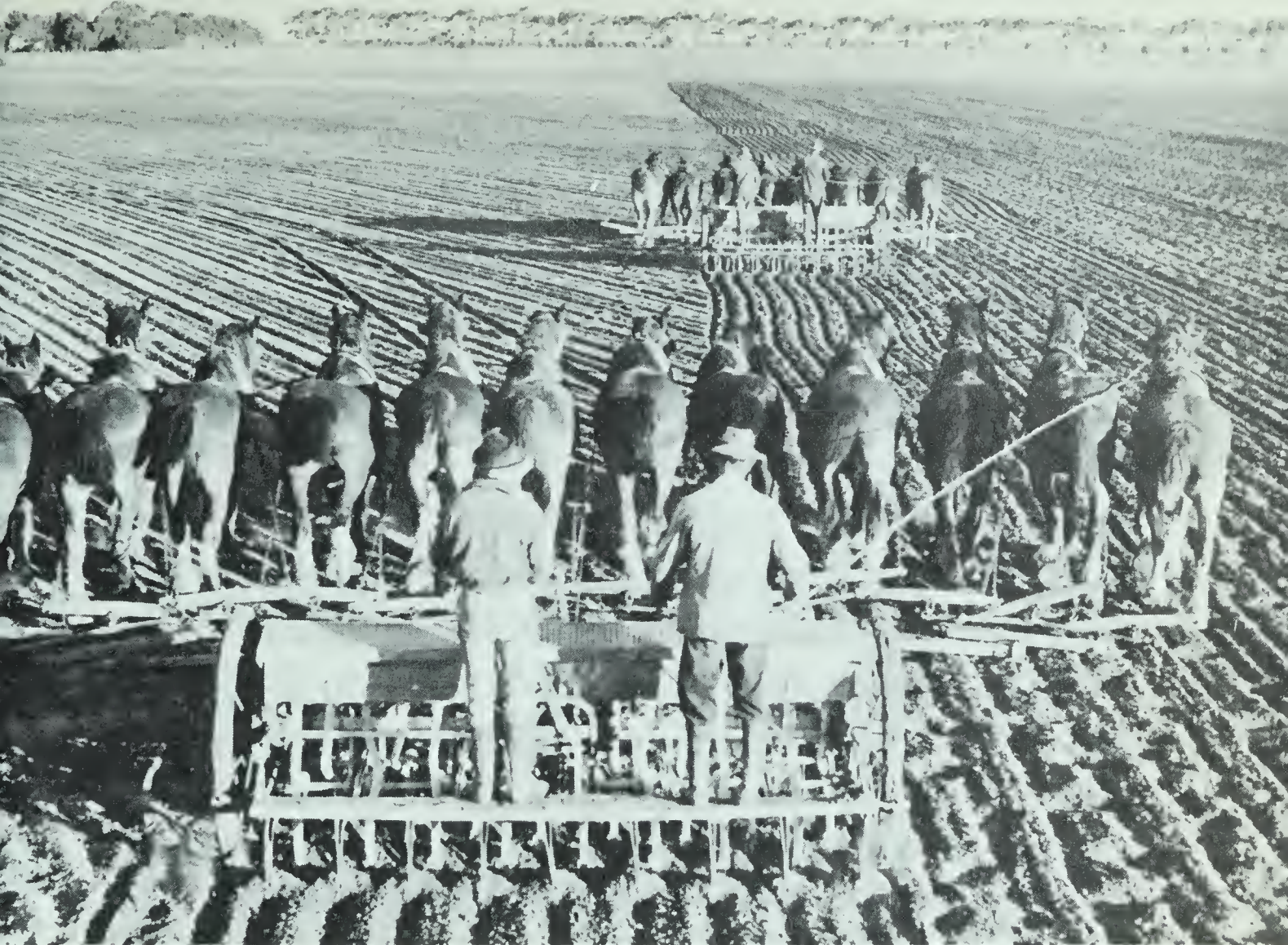
"This is a good life," said Dave's father happily.

The four strong horses began moving across the paddock. They were pulling a machine used for planting wheat. Dave's father, sitting on the machine, was driving. Dave sat beside him. The horses snorted, and Dave could see their breath in the winter-morning air.

"It's a good life," said Dave's father.

Dave agreed. He loved to help his father on the farm. What could be better than this? The earth, plowed not long ago, smelled sweet and fresh. A magpie was singing. The sun was rising into the clear sky.

"It's a good life," said Dave.



AUSTRALIAN NATIONAL PUBLICITY ASSOCIATION

Nine rows of wheat are planted by each machine. The men must be good drivers to handle the twelve-horse teams.

Dave and his father were putting in the seed for a crop of wheat. They were doing this with the machine on which they were riding. This machine, called a *seed drill*, plants sixteen rows of seed at once. It was Dave's task to watch the seed box. He had to make sure that the seed kept flowing through the tubes and into the ground.

All day they would drive the seed drill back and forth across the brown, damp field. It was easy work for the horses because the field was large and flat. Most Australian wheat farms lie in flat country like this. That is why Australian wheat farmers can use big machines.

The horses pulled the drill across the field and back again. Back and forth they went, back and forth. Each

time sixteen more rows were planted. Then something went wrong. Something broke. It was part of the seed drill. The seed stopped flowing into the ground. Dave saw this at once.

“Stop!” he cried to his father.

Dave’s father stopped the horses. He got down and bent over the machine. He studied the broken part. It was not a bad break and could be mended. But it would have become worse quickly if the seed drill had gone on working. Dave had seen the break just in time.

Dave handed some tools to his father, who began mending the broken part. The horses waited quietly. Dave stroked their noses. The horses were friendly. They had always been treated well.

Dave looked across the paddock and thought, “Soon we shall see the young crop.” It would be small, green, and tender at first. But when the warm spring weather came, the crop would grow fast. In summer it would get ripe. It would turn from green to yellow and from yellow to gold. This wide paddock would be like a golden sea, moving in the wind. Dave thought, “Now, when I grow up I’ll—”

“Hey there, dreamy!” his father called. “You can lend a hand here now.”

“I wasn’t dreaming. I was thinking,” he said. But his father was too busy to listen.

Together father and son worked on the machine, and at last it was mended. Soon the horses were at work again, pulling them back and forth across the field.

The sun was high now. It was a fine, warm day. Dave looked at his father and grinned.

“It’s a good life,” Dave said.

Food for the People

Yes, Dave is happy on the farm. What joy to work in the fresh country air! How pleasant to see the crops grow tall and ripe, ready to be gathered!

Dave and his father were planting wheat, the main crop in Australia. The Australian farmers grow many good things. Maybe it is most fun to grow fruit. Peaches and plums, apples and pears, oranges and grapes—how they bloom in the Australian sunshine! Those fruits and others, too, grow in all the states of that sunny land.

The Australian people should never be hungry. The farmers grow plenty of food for everyone. Near the cities you see vegetables being grown. Near by are dairy farms where fat cows stand quietly while they are milked by machines. You feel like thanking them for their milk and for the rich butter and cheese that will be made from it.

The cows are much like ours in America, and so are the other farm animals. The pigs squeal every bit as loud. The hens tell the world when they have laid an egg. The horses roll on the ground after work, just like any good, hard-working American horse.

The Australian farm animals get as fat as ours but on food which is a little different. In America our farmers grow corn for them. But in the dry Australian weather it is easier to grow oats and barley as food for the farm animals. Some corn is grown but not much.

Here is something else that is different. The Australian winters are not very cold, and in most places the grass is never covered with snow. The farm animals can be left out in the fields all year round. Sometimes on a



AUSTRALIAN NEWS AND
INFORMATION BUREAU

It is hard work to cut sugar cane with a heavy knife on a hot day.

cold day you will see a horse or a cow wearing a rug.

If we could visit Dave Shull, we would be sure to see some sheep. In Australia many sheep are raised on wheat farms. Dave's father has about six hundred sheep in his paddocks.

All sheep are not alike. There are different kinds of sheep just as there are different kinds of horses. Most sheep in Australia belong to a *breed*, or family, of sheep called *Merinos*. These Merino sheep are famous for their fine, strong wool. Their bodies are not so large as those of sheep that are raised for their meat.

The Australians eat much meat. They eat less pork and bacon than we do, but they eat more lamb and mutton. If you lived in Australia, you would eat lamb and mutton ten times as often as you do now.

The Australian farmers sell wool to other countries, wool which keeps people warm. They sell food to other countries. Much of that food goes to the people of Great Britain. Some apples and pears come across the Pacific Ocean to us.

The Australian farmers send lamb, mutton, pork, beef, and rabbit to Great Britain. That is a long journey. It is

halfway around the world. Why does the meat not go bad on the way?

It keeps fresh because it is chilled or frozen. In Australia it is put into rooms made cold by machines. Then it is put into ships where it is kept cold in the same way. So it is still fresh when it reaches Great Britain four or five weeks later.

Think of sending meat halfway round the world! That is a long journey for a lamb chop, don't you think?

Tea at Tony's Place

Tony Bandello lives on a farm where sugar cane is grown. Tony does not own the farm. Maybe he will when he grows up. But at present he is only thirteen years old. If you want to look over the farm, you ask for Tony's father.

If ever you go to see Tony, we hope you choose a fine day. That will not be easy because it rains a lot where Tony lives. More than one hundred inches of rain fall every year. Tony says that they get all the rain that is needed in other parts of the country.

Still, the rain is useful because it makes the sugar cane grow tall. Sugar cane is a thirsty crop. It likes plenty to drink. It also likes hot weather and good soil. It cannot stand frost. Sugar cane grows well on the east coast of Queensland and in northeastern New South Wales.

When the cane is full grown, it is three times as tall as Tony. When Tony pushes his way through the tall cane, he feels like an ant in long grass.

In winter or early spring—about August—the sugar cane is ripe. Then the cane cutters come. They cut the

crop down with their big, wide knives. The cane is sent to mills, and the juice is squeezed out. Some of the sweet juice is made into molasses and sirup. But most of it is made into the white or brown sugar which people use in their tea and coffee, their candy, and cakes.

It is hard, hot work cutting sugar cane. Tony soon learned that the cane cutters love to drink tea. So he gets his mother to make tea for them every now and then. He takes this steaming hot tea down to the field. The cane cutters drink it quickly and smile as they go back to work.

These Giants Help Man

Many Australians work in factories. Indeed, more Australians work in factories than on the land. Most of the Australian factories are in Sydney and Melbourne, the two largest cities. And so, of course, that is where most of the factory workers live.

We must remember that there are only 8,000,000 people in Australia. Australia does not have nearly so many factories as there are in the United States. Still, the Australians make most of the goods that they need. They make clothes. They can foods. They make machines for the farmers. They make railroad engines, automobiles, airplanes, and hundreds of other things.

Australian factories, like American factories, need the help of two giants. One of these giants is steel. The other is coal.

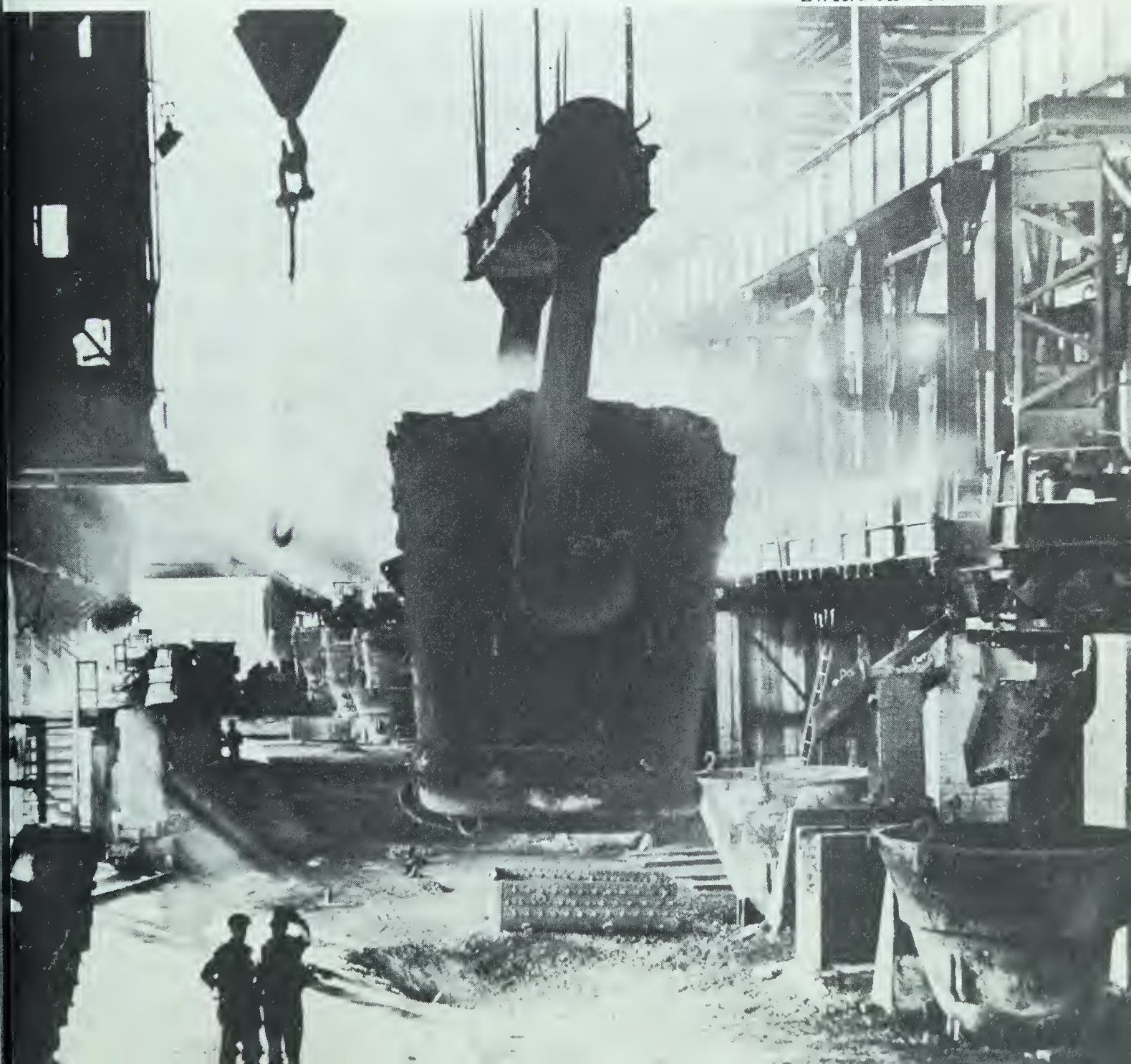
Why is steel important? It is used in so many things. It is used in making ships and railroads, automobiles and big buildings, tools and machines. Steel has many uses because it is strong and lasting.

Steel is made from iron. Iron is made from *iron ore*, an earth material that contains iron. In Australia most of the iron ore is taken from a hill called Iron Monarch. This hill is in South Australia near the port of Whyalla, which you can find on the map on page 176. Ships carry the iron ore from Whyalla around the coast to New South Wales. The iron ore is made into iron and then steel in Newcastle and Port Kembla.

In our country Pittsburgh is called a steel city because steel is made there. Newcastle and Port Kembla are like small Pittsburghs.

A huge ladle of melted steel in a mill at Broken Hill.

EWING GALLOWAY



Steel is clean, tough, and hard to break. But that other giant, coal, is just the opposite. It cracks, it is dirty, it is easy to break. What is so good about coal? Only this—we could not get along without it!

Coal is used with iron ore to make iron and steel.

Coal gives us the gas which cooks our dinners.

Coal gives us the heat which warms many homes.

Coal helps us to make electricity. In this way it lights our cities, drives our streetcars, and gives power to our machines.

The Australians use coal just as we do. Most of the Australian coal mines are in New South Wales, as you can see from the map on page 176.

Hill with a Broken Back

Coal and iron ore are important things. But other useful things as well are found in the Australian earth. On the inland plains of New South Wales is a low, bare ridge. On top of this ridge men have cut great holes a mile long. Now it looks like a long, low hill with a broken back. And indeed, it is called Broken Hill.

For many years rich ores have been taken from this hill. Men have cut away the top of the ridge, and now they work in mines deep underground. A town of nearly 30,000 people has grown up in this dry, bare inland place.

Yes, it is dry and bare for perhaps five years at a time. Then the rain comes. Water rushes along creeks which have been as dry as dust. Green grass three feet high covers the brown and yellow earth. Everywhere beautiful wildflowers, red and black, are like resting butterflies.

Broken Hill is the richest mine in Australia. Silver, *lead* and *zinc* are mined from this hill. Silver is used for making coins, spoons, forks and dishes. Lead is used in roofs and for making water pipes and gas pipes. Zinc is needed in making brass and in keeping iron free from rust. Silver, lead and zinc have many other uses, too.

Only these ores keep men at Broken Hill. One day, perhaps, it will have no ores left, and dingoes will move like ghosts through an empty town.

In the next chapter we shall read the story of a town that is quite different from Broken Hill. It is also the story of a man from Chicago whose dream came true.

Something to Write About

Suppose you could go to Australia on a vacation. Would you most like to spend it with Jackie or Dave or Tony? Give reasons for your answer.

Some Questions the Text Will Answer

See how wisely you can answer these questions. Write short answers.

1. Why does Jackie's father climb trees?
2. Why can Australian wheat farmers use big machines?
3. Why do the Australian farmers not grow much corn?
4. Why do the Australian farmers not keep their animals in barns in the winter?
5. Why does sugar cane grow where Tony lives?
6. Why is steel important?
7. Why is coal important?
8. Why is Broken Hill important?
9. Why does meat stay fresh on the long voyage from Australia to Great Britain?

A NATION GROWS UP

A cold wind whistled down a gray street. It was a street in one of the poorer, crowded sections of one of ^{the} our great ^{American} cities. Here and there groups of children played on the sidewalks and in the street. There was no other place for them to play. The apartment houses along each side of the street were dark and crowded.

A man came into sight. As he walked, he held his fur collar tight around his neck. Looking at the old, ugly houses in this street, he shook his head.

"It's not right," he said to himself. "People should not have to crowd into such places. Their homes should be among gardens and trees. Children should be happy and have parks to play in."

He sighed. As he walked on, he thought, "If only I could help build a city with no dark, crowded houses! A city with nice, bright houses for all!"

The man was Walter Burley Griffin. He was an *architect*, or a man who plans buildings before they are built. Most good buildings are put up according to plans drawn by architects.

Burley Griffin was a fine architect. He used to dream of planning beautiful cities with bright, pleasant homes for all the people. All good architects have this dream. But few are able to make it come true as Burley Griffin did.

At this time in faraway Australia the people had no capital city. True, each state in Australia had its capital. But there was no capital for the whole nation like our Washington, D.C. *at Home*

“Let’s have a capital city for our whole nation,” the Australians said. “And let’s make it one of the most beautiful cities in the world.”

First the Australians looked for a good place where the capital could be built. Some people wanted one place, some another. In the end they chose some wide green fields in a ring of hills. The name of this place was

The Parliament House in Canberra.

AUSTRALIAN NEWS AND INFORMATION BUREAU



Canberra. You will find it between Melbourne and Sydney on the map on page 30.

And now to build the beautiful city. Where would the streets go? Where would be the best places for the homes and the gardens, the schools and the offices, and all the other things a city needs?

The most important building in the new capital was to be the *Parliament House*. Here the lawmakers would meet together. The lawmakers of Australia together form a group called *Parliament*, which is like our *Congress*. Parliament makes laws for the nation, just as *Congress* does in the United States.

For this city a plan was needed, a plan showing where everything would be. The best possible plan for the best possible city. But who was to make this plan?

"We want the best plan that can be thought up," the Australians said. "Let us get many plans and choose the best. Let us get plans from all over the world."

In the year 1911 the Australians promised to give a prize for the best plan for a capital city at Canberra. Soon afterwards in faraway Chicago a man opened his newspaper and read about this promise. The man was Burley Griffin.

Here was the chance that he was looking for—the chance to plan a beautiful city with bright homes for all.

Other Americans read about the prize. So did men in other countries. They got busy drawing plans for a beautiful Canberra. They worked day and night. They mailed their plans to Australia. Soon the Australians had more than eight hundred plans from which to choose.

A group of men in Australia looked at the plans with care. One by one they sent back the plans that they did not like. In time only ten plans were left. Then five were left. Then two. And at last only one. It came from Chicago. It was Burley Griffin's plan! Burley Griffin had won the prize!

What happened now was better still. Burley Griffin went to Australia and watched his young city grow. What a beautiful little city it became! No old, dark buildings. No crowded apartment houses. Instead, a fine white Parliament House. Bright, pleasant homes. Roads that wind among trees and blossoms. Gardens and parks where children can play. A city of space and sunshine.

It is still only a small city. ~~Not more than 20,000 people live there.~~ But Canberra is important because it is the capital of Australia.

The prize that Burley Griffin won was \$8,750. But he also won the most wonderful prize in the world. For what could be better than to become the father of a lovely city?

Australia Is British

Today the Australian lawmakers meet together at Canberra to make laws. Then the Australians say, "Parliament is meeting." Why do Australians say "Parliament" and not "Congress"? They do so because they are British and use British words.

Australia is a British country. That is important, as we shall see. If we keep that in mind, we can understand many things about Australians.

Do you remember about the early settlers in Australia? We read about them on pages 16-31. Most of

those early settlers came to Australia from Great Britain. So did most of the people who came later. In time a new nation, the young Australian nation, grew up.

Australia is like a son in the British family of nations. It did not break away from Britain, as we did long ago. Today Australians think of Britain as a little old mother. Indeed they speak of Britain as the Mother Country.

So the Australians have kept many British ideas. For example, they do not have a President. They have a king!

But the king does not live in Australia. He lives in England, for he is the king of England, too. He is also the king of Canada, New Zealand, and other British countries. He lives in England because England is the oldest British country, the Mother Country.

In the United States we sing "The Star-Spangled Banner" at certain times. That is our national song. In Australia the people sing, "God Save the King." That is also the national song of Great Britain.

In the United States we have our own flag, Old Glory. The Australians also have their own flag. It is a red flag with six white stars, and it has a small Union Jack in one corner. The Union Jack is the flag of Great Britain.

Australians go to church on Sundays just as we do. They say many of the same prayers and sing many of the same hymns. They can choose their own church, and are free to worship as they please. Many Australians belong to the churches that we know here. But many also belong to the Church of England. For that is the national church of Great Britain.

We would find many British customs if we went to Australia. For example, we would need to take great

care crossing an Australian street. If we did not take care, we would soon be run over. Why? In the United States we are used to people driving on the right-hand side of a street. But in Australia people drive on the left-hand side, as people do in Britain.

If we stopped by a window of an Australian store, we would notice another British custom. The Australians use the British kind of money.

Do you see that wide straw hat in the store window? It is a hat for a schoolgirl. See the price ticket on it? In America that ticket might be marked like this:

\$4.95

But the Australians do not use dollars and cents. So the hat in the window is marked

18/6

That means eighteen shillings and sixpence. And the boy's suit in the next window is marked

£2.19.11½

That means two pounds, nineteen shillings and eleven pence half penny. Are you not glad that you do not have to add that kind of money?

Let us think again about those settlers in Australia. They were British people in a strange land. When they came to places new to them, they gave them British names. They named them for important people or places in Great Britain, their Mother Country.



EWING GALLOWAY

A downtown street in Sydney. Notice the cars driving on the left-hand side of the street.

For example, the state of Queensland was named for a queen—Queen Victoria of England. So was the state of Victoria. The city of Adelaide was named for another English queen. Sydney, Melbourne, and the Murray River were named for Englishmen who were important at that time. Perth was named for the city of Perth in Scotland.

In America our early settlers did the same thing. New England was named by British settlers. New Amsterdam was named by the Dutch who first settled there. (It later became known as New York). On any map of the United States we see places named for cities or people of other lands.

A New People

The Australian people think kindly of the lands their fathers came from. But best of all they love their own land, Australia.

In that they are different from the first settlers who went to Australia more than one hundred years ago. Those settlers did not think of themselves as Australians. They were Englishmen in a strange, new land. Australia was indeed strange and new to them. They could not understand it. It was so different from their own tidy little country.

Australia was so big. The bush seemed to stretch away forever. It was so wide, so flat, so lonely. Trees, trees, trees—and among them creatures like wombats and goannas. The very sounds were odd, such as the scream of a large cockatoo or a dingo howling at the moon.

The land was strange to the settlers. It was also hard to farm. Nothing was tame here. The settlers had many troubles. Black hunters, needing food, speared some of the cattle. Dingoes ate lambs. Floods carried away flocks of sheep. Fires roared through the bush. But the worst troubles were the drouths. As months passed without rain, the stock died, crops died, and the hearts of the settlers almost broke.

“Oh, this is a hard, hot, tough country,” the settlers said. They sighed for the green fields and soft earth of Britain, the land they called home.

Most of the settlers were Englishmen, far from the old, old towns and villages that they knew. A few were Welsh and Irish. Others came from Scotland.

Those settlers did not love Australia. They saw little beauty in the gum trees. They planted willows and other English trees which would remind them of home. They brought English flowers and English birds and beasts. Some of these—sparrows and starlings, foxes and rabbits—were to become pests.

How about the children of those settlers? That was a different story. They did not sigh so much for Britain, which many had never seen. They grew up in Australia and they liked it. And in time they became the parents of more children. In this way a new people came into being. These were the Australian people. A new, young nation grew.

Australians who live in the bush today do not fear it. They do not find it lonely. They are used to it. They love its wide spaces, its freedom, its beautiful wild flowers, and the yellow wattle. They love the shy native animals, the magpie's song, and the tall, tough gum trees. They have learned ways to fight drouths, floods, and bush fires, as we have seen. They have learned to love the land, as a man loves a horse that he has tamed.

The Australians have stayed in the British family of nations. They have a king who lives in England. They have kept many British customs. They speak of Great Britain as the mother country, and they help Britain when it needs help.

But the Australians are not ruled by Britain or the king. They rule themselves. They make their own laws. They choose their own members of Parliament. They run their own country.

They are proud of Australia. They think kindly of the British Isles, but they are glad to be Australians.

A Letter from Hank

Hank Tarmon went to Australia with his mother and father. He promised that he would write to his classmates back home in New York. When he reached Melbourne, he visited an Australian family. This is the letter that he wrote about that visit:

Melbourne,
July 28.

Dear Boys and Girls,

We have been in Melbourne for four days. It is a big city near Port Philip Bay. It is like an American

These two Australian boys are trying to catch minnows in a lily pond in the bush.

AUSTRALIAN NEWS AND INFORMATION BUREAU



city, but it has no very tall buildings. Most of the people live in houses of one story that are away from the center of the city.

Yesterday we went to the home of an Australian family, the Cooks. Their house is about four miles out from Melbourne. We went there in a streetcar. On the way we passed by many small houses. They appeared to be dark inside, and they had not been painted for a long time.

"Do the Cooks live in a house like that?" I asked father.

"No," he said. "Dr. Cook is sure to have a nice home. He can afford it."

It seems that some people here are better off than others, as in the United States. *Canada*

As we went on, we saw bigger houses. We noticed that these had fences around them. Many houses had a veranda and a small front lawn and a garden.

Dr. Cook's house was in a quiet street kept shady by trees. When we got to the front gate, two children, Sheila and Gordon Cook, came running across the lawn to meet us. They had a fox terrier, which raced ahead and barked, but only in fun.

"You're the first *Canadians* we've ever seen," the children said. For a moment I felt like something out of that museum to which our class went last year.

Sheila looked like an *Canadian* girl. But Gordon did not dress like the boys in our class. He wore short pants! How would you like to have bare knees in winter? You can guess that the winter here is not quite so cold as in *Canada* New York.

When Dr. and Mrs. Cook heard the pup's barking,

they came out to the veranda. They shook hands with Mom and Pop and took us inside.

We found ourselves in a sitting room. There was a log fire in the fireplace. We all sat near the fire except Mrs. Cook and Sheila. They went out to the kitchen. But soon they were back with a pot of tea, cakes, and hot biscuits. The time was four o'clock, and they called this "afternoon tea."

Gordon passed me a plate of biscuits. "Would you like a scone?" he said. I thought at first that he was joking. But no! Biscuits are called "scones" here.

For a while we talked about sports. The Australians don't play much baseball. Football and cricket are the big games here. They also love swimming, running, and tennis. I have seen quite a number of homes with their own tennis courts.

The Australians don't play American football at all. They play three kinds of football, and none is like ours. And how they love cricket! A big cricket match goes on for a week!

Next Sheila and Gordon showed me some of their schoolbooks. Their map book had eight maps of Australia and only one of the United States. After all, this is not strange. Australian children want to learn most about their own country. It's like that with their history, too. If we had to go to an Australian school, it would almost be like starting school all over.

A little before sunset I went with Sheila and Gordon to buy the evening newspaper for their father. We walked up a hill, and Gordon pointed to the River Yarra about a mile away. It flows through lovely green fields. In summer the Cooks often hire a canoe. They picnic on



AUSTRALIAN NEWS AND INFORMATION BUREAU

British and Australian football, called Rugby, is a more open game than American football.

the riverbank under shady trees. "We'll take you along if you are still here in the summer," Gordon said.

Then they began to think up some things I might enjoy. They are going to take me to Sherbrook Forest in the hills near Melbourne. "You might see a lyrebird dance there," said Sheila.

I like this country. If I were not an American, I would like to be an Australian. The people are so friendly. If I could bring Sheila and Gordon to our school, I know you'd think they are swell.

It will be some time before I am back in New York.

From your friend,
Hank

P.S. When Australians call to each other in the woods, they cry *coo-ee*. They say this sound travels a long way. I told Sheila that I'd be writing to all of you, and she said, "Give them a *coo-ee* from all of us."

So—are you listening? *Coo-ee*, boys and girls, from the children of Australia!

Something to Think About

Make believe that you have been invited to meet Sheila and Gordon Cook at their home in Melbourne. It is an afternoon in July. What would you wear?

And now suppose the Cooks live in Brisbane, and not in Melbourne. It is January. What would you wear?

Filling in Blank Spaces

Here is a short history of Australia. Copy it down and fill in the blank spaces from the words below. It will help if you look at pages 16-31. (*Do not write in this book.*)

For thousands of years a kindly black people called — lived in Australia. Then in the year 1788 the first white people came. They were — and soldiers. It was soon discovered that Australia was a good place for raising —. Many free — came out to make farms. Farmers spread over good lands in the south and east, raising sheep and cattle and growing — and other crops. Big cities such as — and — grew up. In 1901 the Australian colonies joined together to form a new nation, the Commonwealth of Australia. A national capital has been built at —. The Australians choose their own —. They rule themselves. But Australia is a British country because the early settlers came from the —.

- | | | | |
|--------|----------|------------|---------------|
| Sydney | convicts | Melbourne | British Isles |
| wheat | settlers | aborigines | |
| sheep | Canberra | government | |



NEW ZEALAND CONSULATE

Seashore and mountains in New Zealand.

NEW ZEALAND CONSULATE



New Zealand—The Long, Bright Land

HOW MAUI CAUGHT HIS FISH

Long ago a great hero lived on a sunny island in the Pacific Ocean. This hero, whose name was Maui, was very strong and brave. Many good stories are told about Maui. Best of all is the story of how Maui caught his fish.

It was a very big fish that Maui caught. It was even bigger than a whale. Indeed it was the biggest fish ever caught in the sea.

This story is told in many ways. But maybe this is how it happened.

One day Maui was walking along the seashore when he met his two older brothers. They were pushing a canoe into the water.

“Where are you going?” asked Maui.

“We are going to catch some fish,” his brothers said.

“May I come too?” asked Maui.

His brothers shook their heads. “You are too young to come fishing,” they said. “Why should we take you?”

Maui thought, “I wish I had a young brother. I would always be nice to him and help him do things.” But he did not say so. Instead he jumped into the canoe and said, “Do let me go fishing with you. I’m not too young.”

“Oh, all right,” growled his brothers. “You may come along and watch.” Then his brothers each sat in the canoe and picked up a paddle. By forcing these paddles through the water they made the canoe glide forward. They paddled the canoe past a coral reef and put out to sea.

Maui watched while his brothers paddled. Soon blue water lay all around them. Maui looked back. The island where they lived seemed small in the distance.

After a while Maui’s brothers put down their paddles and said, “We will fish here.” Each brother got out his fishing line, a long line with a sharp hook on the end. On each hook the brothers put a fine, fat worm. Here was bait that a hungry fish might like.

They showed the baited hooks to Maui and said, “Do you see? This is the way to catch fish. They will bite at the worms and get caught on the hooks.”

The two brothers threw the hooks into the sea. The hooks sank slowly out of sight. The brothers held their lines and waited.

“Watch us,” they boasted to Maui, “and you will learn how to catch fish. We are very smart fishermen, we are. We are the best fishermen in the world.”

Maui watched. His brothers waited for a sharp pull to come on their lines, which would mean that a fish was down there biting. They waited. And they waited. And they waited. But nothing happened. No pull came. Not a fish bit at the worms.

“Tut, tut,” said Maui’s brothers. “This is indeed strange. We must try again.” So they put fresh worms on their hooks. “Now you will see something,” they told Maui as they threw their hooks into the water.

Again Maui watched. Again his brothers waited, and waited, and waited. But again nothing happened.

"Oh, well," said Maui's brothers at last. "It's no use trying any more." They pulled up their lines and picked up their paddles. "We might as well go home," they said.

"Please don't go home," cried Maui. "I thought you were going to catch some fish."

"Be quiet," said his big brothers. "What can you know about it, a boy like you?"

Then Maui said to himself, "I do wish I had a young brother. I would always be kind to him." But aloud he said, "Now wait a minute. I know more than you think. I know where the fish are. I'll show you if you like."

"Be quiet," said his big brothers. Then they cried, "What's that you said? You know where the fish are?"

"I do," said Maui.

"Then show us at once," they told him.

So again the brothers paddled, and the canoe glided over the sea. On and on it went. Every now and then Maui's brothers stopped paddling and said, "Is this the place where the fish are?" But Maui always shook his head and said, "Keep paddling."

Their island home was now far behind them. The canoe had gone a long way across the ocean. Then at last Maui said, "Stop here. This is where you will catch some fish."

His brothers looked at the sea all around them and said, "What do you know about fishing? There won't be any fish here." However, they picked up their fishing lines again, and soon the hooks were sinking into the deep water beside the canoe.

“Hi! Whee! Whoop!” yelled the oldest brother. There was a fish on his line.

“I have one too!” cried the other.

Each pulled up a fine fish. “See that?” they said to Maui. “That’s the way to catch fish!” They tried again, and in no time they caught some more. And then more! And then more still! Soon the canoe was almost full with the fish that they caught.

How proud Maui’s brothers were! But did they let Maui try to fish? Not they. “You’re too young,” they said.

“No I’m not,” said Maui. “Please let me try. I know a place where I can catch a very big fish.”

“Be quiet,” said the oldest brother.

“Oh, let Maui try,” said the other. “He won’t catch anything. Then he will know how silly he is.”

So off they paddled again, farther and farther across the ocean. And again they stopped paddling every now and then, and said, “Is this the place where that big fish lives?” But always Maui shook his head and said, “Keep paddling.”

By now the canoe had gone almost all the way across the ocean. At last Maui said, “Here’s the place. I’ll catch that big fish here.”

His brothers looked at the sea all around them and said, “What do you know about fishing? There won’t be any big fish here.” However, they put down their paddles and said to Maui, “Hurry up. Catch a fish if you can.”

Maui did not hurry. First he picked up a long rope. One end was tied to the canoe. Maui tied the other end to a heavy rock which he had brought along. He threw the rock into the sea.



MILLARD MCGEE

Maui baiting his hook.

“That rock will do for an anchor,” said Maui. “It will keep the canoe here in this spot.”

“Why bother about an anchor?” asked his brothers.

“You’ll see,” said Maui.

Next Maui got out his fishing line. It was a very thick, strong line. It was so thick and strong that his brothers stared. Then they laughed at Maui. “What will you catch with that?” they joked. “A whale?”

“No,” said Maui. “Not a whale. But something much bigger than a whale.”

“There is no such fish,” his brothers cried.

“You’ll see,” said Maui.

Then Maui got out his fishhook. It was a huge hook. His brothers laughed more than ever. “What will you use for bait?” they asked. “You’ll never get a worm on that hook. It’s much too big.”

“That’s right,” said Maui. “I won’t use a worm.” He bent down and looked at the fish which his brothers had caught. He lifted up the biggest one of all.

“Hey, that’s our fish,” his brothers cried. “That’s the biggest one we caught.”

But Maui smiled. He looked at the fish with care. “It’s a bit small for bait,” he said. “But I suppose it will do.” And before his brothers could stop him, he put the fish on his hook and dropped it into the sea.

How cross his brothers were! They did not want Maui to catch a fish. “Three minutes!” they cried. “If you haven’t caught a fish in three minutes, we are going home.”

One minute passed, and nothing happened. Two minutes passed, and nothing happened. Three minutes had almost passed, when all of a sudden the sea became rough, and the canoe began to toss about. “Here comes the fish!” cried Maui. Then came a mighty pull on his line. The fish was on the hook!

They could not see the fish at first. It was down near the ocean floor. But they could tell that the fish was huge. They could see that from the way it was pulling on the line. It almost pulled Maui out of the canoe.

But Maui, though young, was very strong. He was really a great hero. He held the line firmly and did not let the fish get away.

The huge fish tried to swim off pulling the canoe be-

hind it. But the canoe did not move far, for it was tied to the rock which Maui had thrown into the sea. Now his brothers saw why Maui had brought the rock along.

Next the huge fish came to the top of the water. It turned and headed toward the canoe. If it tipped the canoe over, Maui and his brothers would be drowned.

Maui's brothers yelled with fear. "Let's go home!" they screamed. "That fish is much too big." But Maui gave them comfort, saying, "Don't be afraid. I'll take care of you."

Quickly Maui tied his end of the fishing line around his waist. Now his hands were free. He picked up a paddle and waited. He was just in time. His brothers yelled, "Here it comes!" Like a huge whale the fish came charging across the sea.

With the aid of his paddle, Maui made the canoe move to one side. The big fish missed them. It turned and charged again. But Maui was too quick.

Now the big fish was getting tired and weak. Maui's brothers saw that. They suddenly became brave once more. "Hi there, big fish," they shouted. "Come on and fight."

The dying fish lifted itself almost out of the sea. It beat upon the waves with its fins and long tail. It made the water so rough that the canoe almost sank, and Maui's brothers cried in fear again. Then there was silence. The sea grew calm. The big fish was still. It was dead.

And what a fish it was! It was the biggest fish ever caught in the sea. Maui's brothers could hardly believe their eyes. And never, never again did they say that Maui could not fish.

Do you want to see the fish that Maui caught? Then look at this map, which shows the islands of New Zealand. You will see that New Zealand is made up mainly of two large islands. One is North Island, and the other is South Island.

Now take a good look at North Island. It is like a fish swimming down the page. Do you see its fins and long tail? North Island, the old story says, is the great fish that Maui pulled up from the sea.

Now let us find Maui's hook. You know what a fishhook is like. It turns in a curve, and it has its own tiny hook, called a *barb*, at the point. Can we find Maui's fishhook on the map of New Zealand?

Yes, here it is on the side of the fish. It is Hawke's Bay, on the east coast of North Island. Do you see how the bay is curved? And that point at the north end is just like the barb of a fishhook.

Now to find the canoe. The old story says it was South Island. Can you see it on the map? It is not a very neat canoe perhaps. But a very long time has passed since Maui and his brothers used it. No doubt it has been knocked about by the waves which beat upon New Zealand's coasts.

What about that rock which Maui used as an anchor? There it is. It is now called Stewart Island. Can you see it to the south of South Island? It may seem little on the map, but it has mountains on it. That, it seems, did not worry Maui. He just took Stewart Island, mountains and all, along in the canoe and used it as an anchor.

Well, that is one story of how Maui caught his fish. Do you not think that he must have been a very great hero?

NEW ZEALAND

Cities

■ AUCKLAND.....Over 100,000

● Dunedin.....Under 100,000

★ Capitol

— Railroads

— Sea Routes

- - - Air Routes

0 Scale of Miles 134

One inch stands for 134 miles



Maui's People

The story of Maui and his fish is very old. It was told by the brown people who lived in New Zealand before the white men came. The brown people still live in New Zealand. They are the *Maoris*.

Of course it never happened. Nobody ever fished up North Island. South Island was never a canoe. Still it is true that there was once a man named Maui. And he really did discover New Zealand. He discovered it about one thousand years before the white men did.

Maui lived with his people on an island in the Pacific Ocean. At one time he went to sea with some of his men in a big canoe. A movement in the sea called a *current* swept their canoe far to the southwest. Maui landed on South Island and soon discovered North Island as well.

The men returned to their island home. Maui told his people about the beautiful land in the far southwest. Years later Maui died. But the memory of his discovery lived on with his people. Long afterwards they went forth in canoes and settled in the land which Maui had discovered.

They found other people with brown skins already there. These people, however, did not live long. What happened to them? It is not hard to guess. It is almost certain that some were made slaves by the Maoris. The rest were killed and eaten. For sad to say, the Maoris were *cannibals*. They ate men.

In those days of long ago the Maoris were great seamen. In their big canoes they roamed across the Pacific Ocean. They were fighters, artists, good farmers, and

clever fishermen. We shall read more about the Maoris in New Zealand in the next chapter.

A Land of Wonders

On the map Australia and New Zealand look rather close together. But in truth they are 1,200 miles apart. The wide Tasman Sea lies between them.

How large is New Zealand? It is one thousand miles long and two hundred miles across at its widest part. South Island is about the same size as Florida. North Island is a little smaller.

New Zealand, like Australia, is in the southern half of the world. It lies south of the equator. Therefore its seasons are the same as in Australia. Winter comes in June. Christmas comes in the summertime.

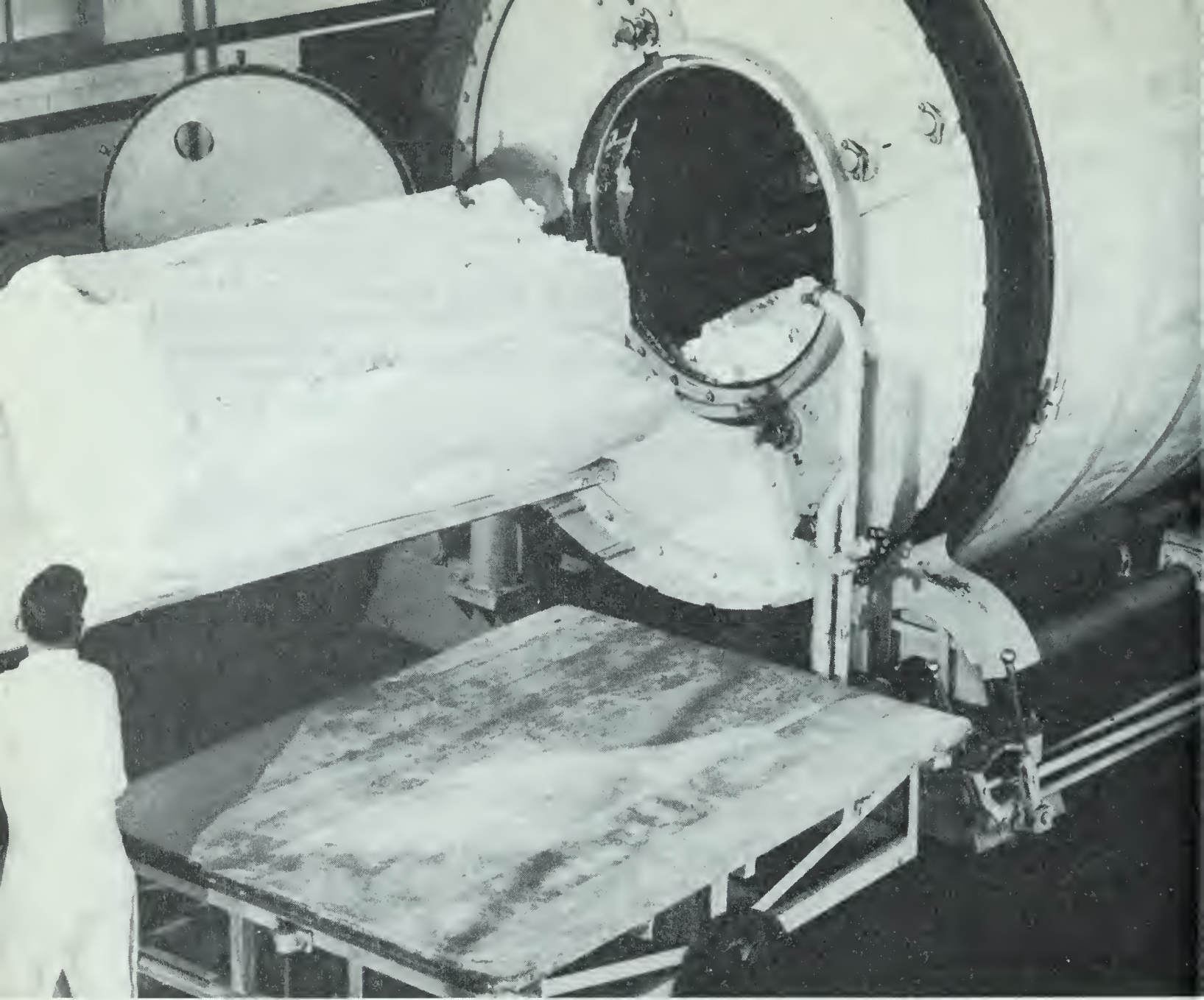
New Zealand is a land of great beauty. It has many snow-topped mountains, lovely lakes, and short, rushing rivers. It has rich plains and dark, cool forests. In the far south some valleys between tall mountains are filled by the sea.

New Zealand is exciting too. There is a place on North Island where mountains burn, the earth shakes, and steam comes hissing out of the ground. Here are dark water holes which boil and bubble. They toss water, steam, and mud high into the air. We shall take you to that wild place in a later chapter.

Meet the New Zealanders

The most important thing about a country is its people. Who lives in New Zealand today? What are the people like? How do they live?

The population of New Zealand is 2,000,000. Of these



Fresh butter being taken out of a churn in a New Zealand dairy, owned by a group of farmers.

only 100,000 are Maoris. All the rest are white people.

The Maoris have lived in New Zealand for about six hundred years. The white people have lived there for about one hundred and fifty years. The parents and grandparents of most of the white people came from the British Isles. For that reason New Zealand, like Australia, is a British country.

New Zealand has small factories but no large ones as we have. It is chiefly a land of small farms and small, fine cities. Sheep and cows do well on the green pastures of both islands. The people sell much wool, meat, butter, and cheese to England and other countries.

Two out of three New Zealanders live on North Island. Nearly all the rest of the people live on South Island.

New Zealanders are like us in some ways, but they look and speak more like English people. They live simply and are fond of their homes and gardens. They love to go to the movies and to ride in automobiles. They are happy walking through the bush or fishing or swimming.

Today brown and white New Zealanders live happily side by side. But in the next chapter we shall see what happened before the two peoples became friends.

Questions the Maps Will Help You Answer

1. Maui's island home is thought to have been Tahiti, far to the north-east of New Zealand. Can you find Tahiti on your classroom globe?
2. Which is larger, North Island or South Island?
3. On which island do most New Zealanders live?

Sentences to Finish

Copy these sentences and fill in the blank spaces with the words below. (*Do not write in this book.*)

1. The people with brown skins who live in New Zealand are ____.
2. The ____ Sea lies between Australia and New Zealand.
3. In New Zealand it is ____ in June and ____ in January.
4. New Zealand is a land of many ____.

Tasman

Maoris

summer

farmers

winter

Something to Do

Look at the picture on page 223. See if you can draw a picture of Maui pulling the huge fish out of the sea.

MAORIS AND WHITE MEN

This is the story of a Maori boy and an iron nail. The boy was Hor-e, the son of a Maori chief. It was a big nail, sharp and strong. It was the kind of nail that carpenters use. But to Hor-e it seemed to be a magic nail, for it was surely the only bit of iron in all of New Zealand!

How did Hor-e get this nail? He got it in a most exciting way. It was given to him by a strange being such as he had never before seen!

It all happened that time the sailing ship came over the sea. Hor-e had never before seen a sailing ship. Nor had his father, the chief. Not even the oldest man in the village had seen such a thing. For this happened long ago in the year 1769. It was before any white men had gone to live in New Zealand.

That was a thrilling day when the ship came. It sailed along the coast and turned into a bay right near Hor-e's village. "Look! Look!" the Maoris cried. They hurried to the beach and stared in wonder. "Look!" they cried again. For now two small boats were coming from the ship.

The boats slid up onto the beach, and the strange men jumped out. They smiled. They spoke in a friendly way to the Maori men. They did not seem to be savage.

When he saw that, Hor-e led the braver children to the beach. The children saw that the strange men had



NEW ZEALAND CONSULATE

Some of the many rocky islands in Cook Strait.

pale skins, and some had blue eyes. Creeping near, the children touched the queer clothes the white men wore. The white men smiled. So did the children, who began to lose their fear.

In a little while the white men went back to their ship. But they did not sail away. They came again to the beach, a number of times. They invited some of the Maori men to visit the ship.

The Maoris went. What a tale they had to tell when they came back! They spoke of tall masts and strong sails. They told of wide decks, of ladders, and of passages and cabins. The children listened with eyes and mouths wide open.

Then it was the children's turn. The strangers invited Hor-e and his friends out to the ship! The children were

afraid. They believed in fairy stories. What if the white men used magic? However, Hor-e and two brave friends paddled out to the ship with their fathers.

The white men made them welcome. Some of the white men spoke in their hissing way. The boys watched them with care. Who knew what a man with a white skin might do?

The white men pointed to a ladder which led deep into the ship. But the boys would not move. They stayed on deck, ready to jump into the sea and swim for their lives.

Now the lord of the white men came along. His name, the boys heard, was Kapen-e Kuku. What would the white lord do?

He came right up to the children and hissed a few words. Then he smiled and went away. "That was a fine white man," the children told each other.

The white lord came back. In his hand was a wonderful gift for Hor-e. It was the iron nail! The magic nail, as Hor-e called it.

Soon it was time to paddle back to the shore. The next day the ship sailed away. As Hor-e watched it go, he held the magic nail firmly in his hand.

Why was that nail so important to Hor-e? It was made of iron, which the Maoris had never seen. It was strong and sharp. It was a new and wonderful tool. It was a better tool than the stone ones the Maoris used.

Hor-e used his nail for many things. He used it for making holes in wood. He cut curly patterns with it on posts and canoes. He used it as a spear point when he grew up and fought his enemies.

He had the nail a long time. Then one day he was in

a canoe, which turned over in the water. Hor-e dived for his nail, but it was gone. The magic nail was lost forever. Poor Hor-e was very sad. He never forgot that nail or the white lord, Kapen-e Kuku.

Why the White Men Hissed

The sailing ship was our old friend, the *Endeavour*. You remember reading about it on page 18. The *Endeavour* was the first ship to sail along the east coast of Australia. On that same voyage it visited New Zealand. Kapen-e Kuku was Captain Cook, the great explorer! And those hissing sounds the white men made? They were sounds in the English language.

The Maoris, of course, had never heard English spoken. If you wish to know how it sounded to the Maoris, try this. Read these last five sentences out loud. Count the hissing noises you make. There are more than fifteen hisses in this one paragraph!

How New Zealand Got Its Name

Captain Cook was not the first white man to see New Zealand. That beautiful country had been discovered by white men seventy-seven years before. In 1692 a Dutch explorer, Abel Tasman, came sailing there in search of new lands.

Abel Tasman made great discoveries, which put new lands and seas upon the map of the world. He sailed first to Tasmania. Later it was given his name. Then, sailing east, he found himself upon a sea where no ship had sailed before. After nine days, land was sighted. A new coast! A place no white man had ever seen! It was New Zealand, the land of the Maoris.

The Dutch explorer sailed along the west coast but he did not set foot on shore. The Moaris here did not welcome him. They did not like strangers. Some Maori fighters paddled canoes out from the beach and killed four of Tasman's sailors. Angry and sad, Tasman sailed away.

Tasman did not give New Zealand its name. This was done by some map makers in the Netherlands. They named it for a part of the Netherlands called Zeeland, which means "sea-land." The Dutch words Nieuw Zeeland in time became New Zealand. It is a good name for a country that has no part far from the sea.

Thus the west coast of New Zealand was discovered by the Dutch. Years later, Captain Cook discovered the east coast, and meeting friendly Maoris, he was able to go on shore. Cook and his men were the first white people to set foot in the land of the Maoris.

One place where they landed was Mercury Bay, on the northeastern coast. Find it on the map on page 227. Here Cook gave a nail to the Maori boy named Hor-e.

Sailing around New Zealand, Cook found that it was made up mainly of two large islands. To make sure, he sailed through Cook Strait, which lies between them. Later he crossed the Tasman Sea and came to the east coast of Australia. Everywhere he went he made fine maps. At last the world came to know the shape of these southern lands.

Today the Tasman Sea, between Australia and New Zealand, is named for the Dutch explorer. And Cook Strait, between North Island and South Island, is named for the English explorer. The names will always remind us of these brave seamen.

It was not long before more sailing ships appeared. A new chapter in history was beginning. The white men were coming. The Maoris, like the American Indians and the aborigines, were to lose their lands.

First, let us see how the Maoris were living before the white men came. Suppose we visit a Maori village of two hundred years ago. But take care. Those people, remember, were cannibals. If they were planning a feast, what could be better than a nice, juicy boy or girl like you?

Come to a Maori Village

It is dawn. The Maoris are still asleep. No one moves among the huts. Past the village a stream flows, and the murmur of the sea can be heard, not far away.

Look! Now some of the people are awake. They are

Maori boys swimming in a hot pool in Rotorua.





NEW ZEALAND CONSULATE

Gaily dressed Maori women weave cloth from New Zealand flax in front of a Maori meeting house.

coming out of the huts. They rub their eyes, they yawn, they stretch their strong, brown arms. The women drag out mats, which are their beds and blankets.

Here come the children! They dash to the creek for a morning swim. A boy takes hold of a rope hanging from a tree. Swinging up over the creek he lets go. What a splash! Shouting with joy, other boys and girls take turns to plunge in after him.

The young children do not bother to wear clothes. The older people have a piece of cloth which they wrap around themselves. Their feet and legs are bare. A feather in the hair does for a hat.

Come closer. Study the faces of the Maori people. The women have blue lines on their lips and chins. The men have curly blue lines on their cheeks and bodies. Look at the chief. He has a pattern of blue lines all over his face! The lines have been pricked into the skin with a sharp bone. When people have this done, we say they are *tattooed*.

Now the day's work begins. There is much to be done. Down on the beach some men are pushing long canoes into the water. They are going fishing. How do the Maoris catch fish? Sometimes with nets, sometimes with a hook and line. Remember the story of that great hero, Maui?

Back in the village some women are making cloth. They weave it with threads taken from a bush we call the *New Zealand flax* plant. What a useful bush the flax plant is. Baskets and cloth, fish lines, and ropes are made from parts of its long leaves.

Let us have a look at a Maori house. We see small, wooden huts made of mud and reeds. The *whares*, as the huts are called, are of one room only. They are rather dark. They have no windows, for the Maoris do not know of glass. Mats on the ground are used for chairs and tables.

How about the kitchen? Where does the Maori mother do her cooking? Outside, where we can see some women cooking now. Their ovens are hot stones in a hole covered with green bushes. Soon a meal of sweet potatoes will be ready. Using flat baskets the women will serve it in the open air. The sweet potatoes are grown in a field that is a clear space in the forest. The forest lies beyond a high wooden fence that goes around the village.

This fence has been put up to keep out other tribes in time of war. The Maoris also grow the *taro* plant, the root of which they eat.

In the field we see men digging with long, pointed sticks. Women are carrying baskets of fresh earth. Sad to say, all this slow, hard, heavy work is being done by slaves. The field workers come from some other Maori tribe. They were taken prisoner in war, and now they must work for the tribe that won the victory.

Back in the village we notice a large hut, strong and well made. Here the people meet to talk or sing in their beautiful soft voices. If we look at the door posts, we shall see Maori works of art. With their stone tools the Maoris have cut out patterns and figures in the wood. The figures are those of chiefs who died long ago. Their wooden tongues poke out. Their eyes, made of sea shells, seem to stare. This art was important to the Maoris. They spent years cutting patterns on huts and canoes.

All day long the people have been working. Now it is evening and time to dance. The fighters dance first. They call their dance a *haka*. Forming a line, they stamp and leap and slap their sides. Their eyes roll and their tongues poke out.

When they finish, the young girls rise. In graceful lines they sway and dip in a *poi* dance. All together they bounce little balls called *pois*, each tied to a string around their wrists. Now they copy trees swaying in the wind. Now they bend from side to side like paddlers in a canoe. Now they dip and turn like birds in the air.

After the dancing the younger Maoris gather in the meeting hut. Old men tell them the history of their people. The boys and girls, sitting on mats, hear the



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A Maori wood carver at work.

story of Maui and his fish. Also, they hear about their Tree God and their Sea God. And they hear tales—true tales—of the warm, green Pacific islands from which their people came.

That was how the Maoris used to live. But the coming of the white people changed all that, as we shall see.

The White Hunters

The next white men the Maoris saw were hunters. They came to New Zealand from America and Europe. They hunted whales and seals, which were found in the southern seas.

The hunters chased the whales in sailing ships and big, strong rowboats. The whales were killed with spears. The seals were killed with clubs when they came onto the shore. The soft sealskins were shipped to America and England where they were made into beautiful, warm coats.

The whales were hunted for their oil and bones. When a whale is killed, oil can be taken from its head and body. In America and Europe this oil was needed for lamps, for this was in the days before electric lights and oil wells.

The bones taken from the mouths of some whales are long, thin, and easy to bend. Whalebone was needed for *corsets*, a garment that women wear.

The search for sealskins, whale oil, and whalebone took many sailing ships to New Zealand between 1800 and 1850. It was a long voyage from Britain, and from Boston, Nantucket, and other American ports. The hun-

Seals sunning themselves on a rocky coast of New Zealand.

NEW ZEALAND CONSULATE



ters were glad to set foot on shore again, even among the fierce, tattooed Maoris.

It was soon discovered that whales came swimming right into the bays of New Zealand. So the hunters stayed on the land, waiting. When whales came into a bay, the hunters rowed out in their boats and speared them.

The *whalers* and *sealers*, as the hunters were called, built little villages along the New Zealand coast. Trade sprang up with the Maoris. The whalers and sealers gave the Maoris guns and axes. In return the Maoris provided fresh food, flax ropes, and tall, thin trees for masts.

A few white men went to live in Maori villages. The Maoris called them *pakehas*, meaning “foreign Maoris.” Later, *pakeha* came to mean all white men, and the word is still used to this day.

The hunters killed thousands of whales and seals, and by the year 1850 there were few left. The day of the whalers and sealers was over. But already there were other white men in New Zealand, men of a different kind. These men were settlers. Their coming meant war!

The Tribes Go to War

The settlers who came to New Zealand were like the settlers in Australia. They were people from the British Isles. They went to New Zealand to be farmers. Land was cheap in this new country, they were told.

The land was bought from the Maoris, who were paid very little for it. By the year 1856 the Maoris had sold all of South Island and part of North Island. The British settlers built homes and towns. They brought sheep, cows, horses, wheat, and plows to New Zealand. Farms

owned by white men—by pakehas—began to spread across the country.

The Maoris did not like losing their lands. They like it as little as did the American Indians and the aborigines of Australia. But none of these people could stop the white settlers.

The Maoris were good fighters, but they had not learned to act as one group of people. They were made up of many tribes, which were forever fighting among themselves. So when one tribe lost its lands to the white settlers, the others did not mind.

Once the tribes had fought with spears and clubs. They fought for land and slaves. Then white men came and sold guns to the Maoris. Now the Maori wars were even worse. Far more Maoris were killed. And all the time settlers kept coming, kept on buying land.

One day a tribe sold some land that belonged to another. The settlers who had bought the land tried to take it by force from the real owners. Some North Island tribes sprang to arms against the British.

For eleven years those tribes fought bravely, but they could not win. The British were too strong. Also, the British were helped by other Maori tribes.

For a long time after that the Maoris were sad and angry. But in the end they and the white men learned to live together in peace. They became friends. Today Maori and pakeha, the brown man and the white man, are like brothers.

Are the Maoris happy now? Yes. Some lands have been kept for them. They farm them as white men do. They are more free than they used to be before the white men came.

You see, once the Maoris were cannibals. Today, of course, they are no more cannibals than you are. Today every Maori is free from the fear of being eaten. Once the Maoris kept slaves. They do so no longer. Today every Maori is free from the fear of being made a slave.

Once the Maoris had only tools of stone, and they knew nothing about books. Today machines help them work, and books bring pleasure to their hours of rest. The Maoris are happier than they were before Abel Tasman discovered the long, bright land the wonders of which are told about in the next chapters.

Something to Do Outside of Class

If you enjoy making things, build a model of a Maori village. You can cut houses and canoes out of soft wood.

Sentences to Finish

Copy these sentences on a piece of paper and finish them with the words below. (*Do not write in this book.*)

1. Whales were hunted to get ___ for lamps.
2. Maoris get thread from the New Zealand ___ plant.
3. Soft, warm coats were made from ___.
4. Whales were hunted also to get ___ for corsets.
5. Some Maoris treated other Maoris as ___.
6. White men became known as ___.

slaves

sealskins

pakehas

oil

flax

whalebone

Quiz Questions

1. Why did Hor-e find his nail so useful?
2. What did the Maoris call Captain Cook?

WHERE THE EARTH GROWLS AND SPITS

"The ground is shaking!"

Jock Way could not help crying out. And young Prof was a bit afraid too. With Miss Lukatina, their Maori guide, the two boys were walking along a path on North Island. All of a sudden the ground shook under them! Then it stopped shaking. But only for a moment.

"It's moving again!" yelled Jock.

The ground stirred as if alive. For several seconds it trembled and shook. It gave a groan and a low rumble like a distant railroad train. Everywhere steam was hissing out of pools and cracks!

Miss Lukatina only laughed. "Don't be worried," she said. "There is no need for alarm. Come this way, please."

It was wintertime and cold enough for snow. But Jock and Prof did not notice the cold. They were too excited. This was their first day in the hot-pools district—surely the most alarming, the most exciting, the queerest place in the world!

Jock and Prof were both fourteen years old. They lived in Auckland, the largest city in New Zealand. Now it was vacation time, and they were visiting the hot-pools district, a day's journey south of Auckland.

The boys were cousins but not close friends. They were interested in different things. Tall, easygoing Jock

A geyser in the hot-pools district. Hot water and steam spout out of the ground.



was crazy about games. But Prof, who was short and a bit fat, loved books. Prof's real name was Philip, but his friends called him "Prof" for fun. They said he would be a *professor*, or teacher, someday.

The cousins had come here with their Uncle Dick, who was a sick man. Many sick people come to Rotorua, the chief town in the hot-pools district. At Rotorua they bathe in wonderful swimming pools, which help people with sore bones. The water is hot when it comes out of the ground, and there is something in it which takes away pain.

"As soon as I get into those pools, I'll feel better," said Uncle Dick with his quick smile.

While Uncle Dick was in the big bathhouse, the boys

went off to see the sights. Now here was Miss Lukatina saying to them, "This way, please."

The Maori guide moved forward, climbing a low hill. As they followed her, the boys stared about them. Steam hung about them like a mist. It was rising everywhere—from cracks in the ground, from holes in cliffs, and from hot pools. It was as if all these fields, hills, and pools were resting on some huge furnace.

"Hey, look!" cried Jock.

Ahead was a thrilling sight. A column of steam and water was spouting from the ground. Up, up it went, until it was as high as a big tree. It was a tall fountain of steam and boiling water. For a moment it stayed like that, with rainbow colors in its spray. Then down it sank into the dark pit from which it sprang. It was a *geyser*, a spring which throws up hot water and steam every now and then.

"There's another!"

Almost twenty rocky pits were spouting up boiling water or mud. First one geyser shot up like a huge white feather. Then another one spouted. Deep in the pits the water boiled and spit.

"I wonder what makes them do that?" said Jock.

Miss Lukatina was not sure, but Prof knew. He had read about geysers a few days before, he said.

"Meet the professor," said Jock.

But Prof did not mind being teased. "The inside of the earth is very hot," he said. "In some places the heat comes up through the ground. This area is one of those places."

Young Prof drew on the ground with a stick. "Some of the deep holes here," he said, "are full of water. Deep

down in these holes the water gets very hot. Steam collects and sooner or later it must come out. Up it rushes, pushing the water up too. Whoosh! We have a geyser."

Jock thought this was interesting. He was sorry he had made fun of his cousin. "Thanks, Prof," he said, and Prof smiled back in a friendly way.

What a strange district this was! Here was a chain of small lakes. Some were blue and some green, and one was dark red. They were all very close together. Here the ground was pink and there it was yellow. Cliffs hissed out steam, and waterfalls ran hot. And here was a pit that seemed to cry out. Steam rushed out of it with a scream! "It's been moaning like that for five hundred years," Miss Lukatina said.

Later that day Jock said, "Say, Prof, what made the earth shake under our feet this morning?"

Prof said it was caused by steam pushing about down below. Or it could have been a small *earthquake*, a movement of the ground. Earthquakes were often caused by some break in the rocks miles below.

In the days that followed, Jock and Prof often visited a Maori village near Rotorua. They swam in a warm pool with some Maori boys. They watched Maori mothers washing mats in a hot pool. They ate potatoes cooked in a pool of boiling water. One day the Maoris in this village put on the kind of clothes their people wore long ago, before the white men came to New Zealand.

Near the village was a field of muddy pools. Drifts of snow lay on the ground, but in each pool the mud was boiling. Plop, put, smack! It was like porridge being cooked for a giant.

Near by the boys came upon a man fishing in a cold

stream. While they looked on, he caught and killed a fish. "Have a boiled fish," he said with a grin. And he tossed the fish into a pool behind him. It was only a few feet from the cold stream and yet the water in the pool was boiling hot!

As time passed, Uncle Dick became much better, thanks to the wonderful baths at Rotorua. On the last day of the vacation he said that he felt quite well again.

"Come out with us, Uncle," the boys said. "Let's make this the best day of all."

It was. Yet on this day Prof nearly lost his life.

They all set out in the morning in Uncle Dick's automobile. Miss Lukatina went also. She showed them a pretty road that curved for miles beside the Waikato River, which flows through the hot-pools district. At one place they left the car and walked down a path to a pool which she wanted them to see.

The pool lay at the foot of a little cliff. (You can see a picture of it on page 251.) Standing on a path, the boys and Uncle Dick looked down in the black, boiling pit. The water moved and turned like some dark monster. Steam came up like dragon's breath.

Miss Lukatina and Uncle Dick turned to go back along the path. But the boys, instead of following, climbed onto the cliff above the pool. Then they turned away. At that moment Prof slipped! He tried to keep his balance, but failed. For a terrible second it seemed as if he must fall into the boiling pit. But quick as light Jock grabbed his arm and held him.

"Whew!" Jock said. "That was a near thing, Prof!" And Prof nodded. He could not speak.

That evening the boys told Uncle Dick about it. "Jock



A Maori guide stands near the cliff above a boiling pool.

saved my life,” said Prof. “My word, he was quick! I didn’t think anyone could move so fast.”

Jock went red but he was pleased. “It was nothing,” he said. He turned to Uncle Dick. “You know, Uncle,” he said, “I’m so glad Prof came on this trip. He could tell me such a lot about this district. It made everything much more interesting.”

“Well,” said Uncle Dick, “I’d like to say something. You boys are a good pair, but you each have much to learn. Prof, why not play more games at school? Then you wouldn’t be so clumsy. You would learn to move fast like Jock. And Jock, why not read a book once in a while? Then you’d know a few things, as Prof does. And you’d find the world a much more interesting place.”

The boys laughed and joked. But they knew their Uncle was right.

"Maybe we can help each other," said Prof to Jock.

"Maybe we can," Jock agreed.

They looked at each other, smiling. From that moment they were good friends.

The Fires Below

Soon we shall read a story about a terrible thing that happened in the hot-pools district. One night, without warning, a mountain split open and threw red-hot stones into the sky. A lake blew up. Three Maori villages were wiped out. More than a hundred men, women, and children were killed!

What a night of fear that was! It showed how strong and terrible nature can sometimes be. However, before we read about that we must first understand a little more about this part of New Zealand.

Most of the hot pools and geysers are found near Rotorua, the town visited by Jock, Prof, and their Uncle Dick. Rotorua is between Lake Taupo and the Bay of Plenty. If you turn to the map on page 227, you will easily find Lake Taupo, which is near the center of North Island. The Bay of Plenty is on the northeast coast.

Year after year the hot springs between Lake Taupo and the bay bubble and steam. They do no harm. Why are geysers, steaming cliffs, hot waterfalls, and boiling mud found in this small area?

The reason is not hard to understand. To begin with, our earth is round like a huge apple. And like an apple it has a skin around it. The earth's skin, or *crust* as it is called, is made up mostly of stone. It is a thick, strong,



JAMES SAWDERS—COMBINE

Beyond this dairy stands snow-covered Mount Egmont.

rough crust. Parts of it are below the oceans. The deepest valley is little more than a scratch on it.

The inside of the earth is solid but very hot. It is a mass of heat, far hotter than any furnace we know. It would burn us up in a second but for that strong crust of stone and soil on which we live.

However, in some places the crust is cracked or weak. It breaks, causing earthquakes. Or it lets some of the central heat come out near the top of the ground.

Where are some of the weak parts in the earth's crust? Iceland lies over one weak part. So does Yellowstone Park in our own country. And so does the hot-pools district on North Island, New Zealand.

Sometimes a weak part of the crust opens with a roar. Huge amounts of ashes and melted rock called *lava* are tossed up into the air. The lava may flow down the side of a mountain like a burning river. When it cools, it turns quite solid.

These openings through which lava comes up are called *volcanoes*. As a rule, volcanoes are hills or mountains of lava and ash, with a hole down through the middle. If you turn to page 274, you will see a picture of the top of a steaming volcano. And on page 253, you will see a mountain which has been formed out of the lava hurled up from below.

In the next section we shall read of the night of fear when an old, quiet mountain turned into a roaring volcano!

The Night of Fear

Mount Tarawera seemed to be such an old, quiet mountain. To the Maoris who lived in its shade it was a place of calm and beauty. These Maoris used to bury their dead on the mountaintop. Surely, on old Mount Tarawera, their dead would rest in peace forever. None of them thought that one night, without warning, it would burst into flame and steam?

Lake Rotomahana—remember that name—lay at the foot of the mountain. It was a rather small lake in that year of 1886. Hot springs bubbled on its shores, but nobody thought twice about that. This was in the hot-pools district of North Island, and hot springs were everywhere.

Beside the lake were two bubbling pools. The rocks below them led down to the lake like marble steps. One

great flight of steps was white. The other was pink. Hot spring water flowed down these steps, making a lovely sight. The place was famous for its beauty.

Two little villages lay at the foot of the mountain. The Maoris who lived there worked, ate, laughed, and slept. They did not know the terrible fate that was in store for them.

Nearby, beside another lake, was the village of Wairoa. Here white people as well as Maoris lived. The people of Wairoa helped visitors who came to see the wonders of the district.

One June night the people of Wairoa went to sleep as usual. Soon after midnight there was a rumble like thunder. The noise seemed to come from Mount Tarawera. Then the earth began to shake and tremble. "An earthquake!" people cried. It was a worse earthquake than any they had known.

Everyone jumped out of bed in alarm. But it was hard to stand up because the ground was shaking and swaying. People took hold of tables, posts, and doors—anything that would help them to keep their balance. Then under their feet they felt a heavy pounding, as if some giant were hitting upward with a huge hammer.

The houses shook. Would they fall? Quickly fathers and mothers dressed their children and took them to stronger, safer houses. A few brave men climbed a hill above the village, wondering what they might see.

"Look at Mount Tarawera!"

The quiet, old mountain had once been a volcano, but that was long, long ago, before any man lived in New Zealand. For hundreds of years no flames or lava had come bursting out of Mount Tarawera. It was a

dead volcano, one that people thought would never spout again.

But no! Mount Tarawera was not dead! It had been lying asleep all those centuries. Now with a roar it was awake!

“Look at Mount Tarawera!”

With a noise like thunder Mount Tarawera split and burst out in flames! Up from the mountain a cloud rose as black as ink. Through this cloud shot streaks of light—red, gold, orange, and white—like twisting snakes. Lightning struck down upon the mountain sides. Thunder roared. Balls of fire rose into the sky and burst into ribbons of flame.

Giant stones, red hot, shot into the air and came crashing down the mountainside. Fires within the mountain threw up a blinding glow.

Now the huge cloud spread. Thunder sounded like mighty guns. The noise was heard four hundred miles away. A great wind came hissing through the trees. A terrible storm was coming. The people on the hill ran back to the village looking for shelter.

“Here it comes!”

Ashes, mud, and stones poured down like hail. Balls of fire fell in showers for miles around. Down in the village people were crushed as walls gave way and roofs fell in.

A few Maoris and white people had taken shelter in Sophia's home. Sophia was a Maori guide. Kind, wise, and brave, she gave them courage. Together they lifted pieces of wood against her roof to hold it up. Perhaps now it would not fall under the weight of mud, ashes, and stones that were raining down.



Mount Tarawera and Lake Rotomahana. Notice the great gap in the mountainside which appeared the night this mountain became a roaring volcano.

For hours the people in Sophia's hut waited. They could hardly breathe because of the ashes in the air. Now and then a man or a woman looked up at the roof. Would it hold?

At last the night was over. Yet it was still dark, for clouds of ashes shut out the light of the sun. The ashes were still falling.

As soon as it was safe, the people came out of Sophia's hut. What a sad sight met their eyes! A blanket of mud and ash was spread across the land. The hillsides, once green with trees, were gray and bare. The valleys and streams for miles around were now stretches of blue-gray mud. Lake Rotomahana had become a huge and terrible basin. Geysers spouted from it out of black pits. Steam rose from its bed in a cloud that rose higher than the mountain.

Even more sad to see was the village of Wairoa. The houses lay in ruins, covered with mud. People were buried beneath the houses. Later, some of them—the lucky ones—were dug out still alive.

What of the two villages at the foot of Mount Tarawera? Alas, they were buried with all their people. The villages and the people in them were never seen again!

For years after that night of fear this area was like a desert. But in time the trees and bushes, the grass and the flowers grew again. Beauty came back to Mount Tarawera. Nature, which had been so violent, mended the damage. But to this day the great gap can be seen where the mountain split. You can see this gap for yourself if you turn to the picture on page 257.

Mount Tarawera has gone to sleep once more. Perhaps it is dead. It may never awake again. And Lake Rotomahana? Year after year more water collected in its new bed. The new Lake Rotomahana grew thirty times as large as it was before.

That night of fear is almost forgotten now. The people of New Zealand do not worry about it. It happened in grandfather's time. And it may never happen again.

Also, remember this. The hot-pools district, that

place of wonders, is only a small part of New Zealand. Indeed, it is only a small part of North Island. The rest of New Zealand is quite different, as we shall see.

Matching Questions

In the first column are the beginnings of six sentences. In the second column are the endings of six sentences. Copy down the beginnings and join the correct endings to each one.

| | |
|----------------------------------|-------------------------|
| The inside of the earth is | in the United States. |
| Lava is melted rock | throws up hot water. |
| A sharp movement of the earth is | very hot indeed. |
| A geyser is a spring which | like an orange. |
| Geysers can also be seen | tossed up by volcanoes. |
| Our earth is round | an earthquake. |

Writing a Letter

Would you like to get a letter from a New Zealand child? Write to the Director of Education, Wellington, New Zealand. Give him your age and say that you are reading about New Zealand in a book and would like to exchange letters with a pen friend. Ask him if he will please pass your letter on to some New Zealand child.

Something to Do by Yourself

With crayons or paint, draw Mount Tarawera as it might have looked during that night when it burst open.

THE BIRDS AND ANIMALS OF NEW ZEALAND

The bird was flying low over a hill when it was hit by a stone. Its left wing went limp, and then it began to fall. As it struck the ground a boy came running.

"Look! It's a godwit!" the boy cried.

The boy reached down, and the godwit tried to flutter away. The bird was afraid, but the hands that closed over its wings were gentle.

"You poor bird," the boy said as he lifted it. Then another voice sounded. A second boy joined the first.

"It's only a godwit. Let's break its neck!" said the second boy.

The godwit, of course, did not understand what the boys were saying. That was just as well, for had it understood it might have been even more afraid.

"Come on, Joe. Let's break its neck," said the second boy again.

"But why?" asked Joe, who had a kind heart.

"Aw, just for fun," said the other. "I guess it's fun to kill birds. My uncle does it with a gun. Come on, give it to me. It's mine. I hit it with a stone."

"What a brave fellow you are, Herb," said Joe. "Throwing a stone at a bird. It never did you any harm. Why don't you pick on someone your own size?"

Herb's eyes seemed to burn with anger. "Like you, for instance?" he said, lifting his fists.



New Zealand godwit.

“If you like,” said Joe calmly. Joe was still holding the godwit but he was ready to put the bird down and fight.

Silent, stiff, the boys looked at each other. Then Herb dropped his fists. With a shrug he walked rather quickly away, shouting, “All right, Joe Prichard! You’re lucky I don’t get mad at you, that’s all!”

Joe grinned. He looked down at the bird in his hands. "Herb was scared," he said. But the godwit lay still.

Joe set off for home. As he walked, he looked at the bird in his hands. The godwit was red-brown in color. It was as big as a pigeon, but it had strong, straight legs. Its beak was about three inches long. That was just what it needed for catching its food. Joe had seen godwits walking about in shallow water, catching little crabs and small fish as the tide went out.

When Joe reached home, his father was in the garden. Mr. Prichard was a big, kind man who kept a small store.

"What's that you have, Joe? A godwit?" his father said.

"Yes, Dad. It can't fly. Its wing is hurt—see?"

Mr. Prichard touched the wounded wing and the bird jumped.

"Now then, now then, we won't hurt you," Mr. Prichard said. He went into the store and came back with a long, narrow piece of cloth. Then, while Joe held the bird, his father tied the wing against the bird's body.

"It will mend," he said when this was done.

Next they put the godwit into a big box with a net of wire in front. The bird tried to break through this wire, but it was too strong. Joe and his father went away, leaving the bird in the cage. For hours it kept moving about, trying to get out and away.

Slowly, as the days passed, the bird became less afraid. It lost its fear of Joe, who went to see it often. Indeed it learned to welcome him, for he brought it food and water. Perhaps the bird even found some comfort in Joe's love.

"Cheer up, Kuaka. You'll soon be well," Joe cried. *Kuaka* is the Maori word for "godwit."

As the end of summer drew near, the bird seemed more and more to want to escape. It was the time when godwits leave New Zealand on their flight to the north.

"Did you ever hear about the flight of the godwits?" Joe's father asked him one morning.

"No," said Joe, who was cleaning the cage. Nor did he want to hear about it. He guessed that his father had something else in mind. His father wanted him to let Kuaka go free. Not that his father said so. But somehow Joe knew.

"I won't let Kuaka go. I won't!" Joe told himself. "It's mine. It's my pet. I won't let it go!"

"These birds are wonderful travelers," said Joe's father. "Just think, Joe. They fly over continents and oceans. Nobody knows how they find their way. Joe, do you know where Kuaka was born?"

Joe shook his head.

"Thousands of miles away," Mr. Prichard said. "Kuaka was hatched in Alaska or Siberia. Tens of thousands of godwits go there to nest. Then, when winter sets in, they fly south to keep warm. They fly all the way to New Zealand. Look at any map and see how far that is.

"Now the summer is ending here, and it's almost time for the godwits to go back. The warm weather is coming in the northern half of the world, and the godwits want to return to their nests in Alaska and Siberia.

"Soon they will leave us. Away they will fly, past Australia to New Guinea and the Philippine Islands, and then north again, ever north, along the coast of China. Flying for five weeks. Here and there they will rest, of

course, but never for long. At last they will reach their nesting places thousands of miles away."

Joe was silent. He looked at Kuaka, who was standing in a corner of the cage. The bird seemed to be sad. Its head was resting on its shoulders. But Joe said to himself, "I won't let it go. I won't!"

"When the godwits leave New Zealand," his father said, "they take off from the northern coast, not far from here. Many take off from Spirits Bay on the very tip of North Island. What a wonderful sight that is!"

Poor Joe! He was only nine years old. And he was dearly fond of his pet. Why should he let the bird go?

A few days later a new thing happened to Kuaka. The bird was put into a tiny box with a wire lid. Joe lifted the box into an automobile. Then for a long time Kuaka heard a strange noise and felt a bumping. Joe and his father were driving north to Spirits Bay.

"We'll see the godwits take off," Joe's father had said. "Why don't you bring Kuaka along?"

And now here they were, and before them was a thrilling sight. On the beach were thousands of godwits. They covered the sands like a living, red-brown carpet. Yet even more godwits kept coming, and their cries were louder than the surf.

As sunset drew near, the godwits grew more and more excited. Every now and then birds rose with a huge flutter of wings. Then they settled on the sand again. In its box Kuaka cried and beat its wings, as if to say, "Let me go!" But Joe looked away and said to himself, "I won't!"

Now the sun was setting. It seemed to touch the ocean. The clouds turned red and gold. Then something

happened. One old bird gave a loud call and shot high into the air. With the roar of a hundred thousand wings the whole company of birds rose and followed him!

"They're going, Joe," said Joe's father.

Joe gave a sudden sob. He could hold out no longer. With a quick movement he took Kuaka out of the box. He pressed the bird against his cheek. And then he set it free. There was a flutter of wings, and the bird was on its way.

"Oh-h-h-h!" breathed Joe with a catch in his voice.

Up and up the bird flew. Soon it caught up with the others. All around it were flying birds. The sky was filled with the sound of beating wings.

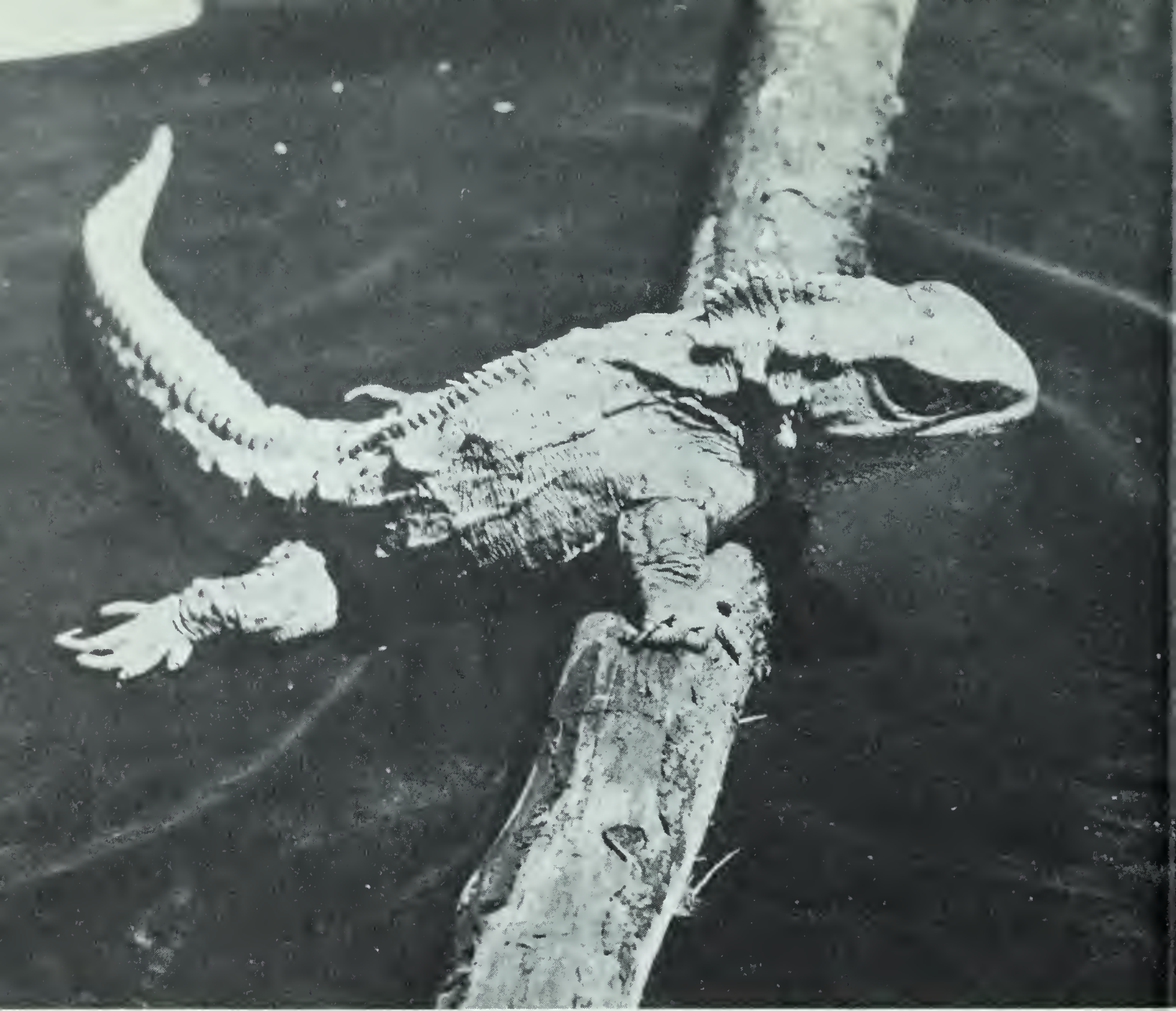
Far below on the beach Joe watched. The cloud of birds became smaller and smaller. Now it was like a tiny stain in the sky. It turned north and soon it was lost in the darkness.

Joe bent his head. He looked in the box. A small red-brown feather lay in one corner. "Poor Kuaka," he said. "I'll never keep another bird in a cage."

His father smiled and gave him a quick hug. He did that only when he was very, very pleased.

What the Maoris Found

When the red Indians came to America, they found bison, deer, otters, skunks, racoons, and other wild animals. When the aborigines went to Australia, they found kangaroos, koalas, wombats, wallabies, bandicoots, and other wild animals. When the Maoris went to New Zealand, they found whales and seals living around the coasts. Two kinds of bats flew among the trees. There were a few lizards and spiders, and another



A tuatara. The third eye does not show, for a thin layer of skin has grown over it.

little creature like a lizard. But there were no land animals of the kind we think of, like rabbits or tigers—land animals which you can hunt, or which hunt you!

The Maoris had some dogs for a while. They took dogs with them when they went to New Zealand in their big canoes. But the dogs died out, and in time the Maoris had none.

The Maoris also brought some rats in the canoes. Sad to say, the rats did not die out. They ran off into the forest and became a pest like rats everywhere.

Then the next animal came to New Zealand—the good, fat, grunting, tasty pig. The first pigs came with Captain Cook. He carried pigs on his ship for food. He let some of them loose in the New Zealand bush. The pigs ran wild. They grew in number. The Maoris ate many but could not catch them all. And to this day the wild pig is hunted in New Zealand.

Although the Maoris found few animals in New Zealand, they found many lovely birds. Indeed, New Zealand has more than two hundred kinds of native birds. Some sing sweetly, like the bellbird. Some have bright colored feathers, like the New Zealand pigeon and the swamp hen. One little gray fellow, the *wrybill*, has a crooked beak! He is the only bird in the world with a beak that turns to one side. The New Zealand bird which is best known far and wide is the *kiwi*. We shall read about it in the next section.

A Famous Bird

Like the Australian emu the kiwi cannot fly. He is a running bird. However, he is not built for speed, as you can see by his picture on page 268. Did you ever see such a funny-looking bird?

Look at that five-inch beak of his. It bends! And here is another odd thing. All birds breathe through little holes in their beaks. All birds except one kind have these beak holes near their heads. But the kiwi has his breathing holes at the beak's tip. Let us hope he never catches a cold in the beak.

Look at the picture again. Notice how fine the kiwi's feathers are. They are almost like hair. Maori chiefs used to wear cloaks made of kiwi feathers. A kiwi cloak



The kiwi may not be a beautiful bird, but New Zealanders are very fond of it.

was a real prize and was worn only at feasts and at other special times.

The kiwi is a little larger than a barnyard hen. For her size, mother kiwi lays the largest egg of any bird. It is one third of her own weight. It weighs as much as seven ordinary hen eggs. It takes nearly four times as long to hatch.

Father kiwi does the hatching. He sits on the egg for eleven weeks. At last a kiwi chicken comes out. At first

sight it seems like a beak with a ball of fluff on one end.

Kiwis use their beaks for digging out worms. A long, fat earthworm brings joy to the heart of any kiwi. Perhaps he will call to his mate, "Kiwi! kiwi!"

Kiwis wait until night to go on an earthworm hunt. In the daytime they curl up and go to sleep in some hollow place. Shy, brown birds, they are hard to see among the brown ferns of the forests. Indeed, few New Zealanders have seen a kiwi in the woods.

All New Zealanders love the kiwi. Many look upon him as their national bird, just as the eagle is ours, and the emu is the Australians'. New Zealand soldiers are sometimes called "kiwis" by their friends, who think of that wonderful New Zealand bird.

New Zealand used to have a bird even more exciting than the kiwi. This was the *moa*, the kind you might meet in a bad dream.

Twice as Big as a Man

Think of the tallest man you know. Now try to think of a bird twice as tall as that. Well, that is what a moa was like.

The moa was a running bird like the ostrich and the emu. The bones at the top of a moa's legs were bigger than those of a horse! Mother moa laid an egg as big as a football.

When the Maoris arrived in their canoes, they found quite a few moas crashing about New Zealand. Of course the Maoris had never heard of birds like that. The moas must have given them a shock.

It was not long, you can be sure, before the Maoris went on a moa hunt. The birds, though big, were not

dangerous. They could be killed with stones and clubs. Roast moa made a hearty meal.

Sad to say, the Maoris killed the last of the moas long ago, before the first white men came to New Zealand. Now only giant bones and a few tough eggshells and feathers are left to tell us about the moa.

The Third Eye

When you turn over a stone in your garden or in the woods, what happens? Little insects hurry away to hide in the grass. But suppose you turn over a stone in a New Zealand forest. What do you find?

Usually nothing!

Compared with most other countries, New Zealand has few beetles, ants, and other insects. In all the forests and fields of New Zealand there has never been a snake!

The most dangerous creature in New Zealand is the *katipo*, a black spider with a red mark on its back. The *katipo* is a cousin of our black widow spider and the Australian red-back. The bite of all three is poisonous.

Although New Zealand has no snakes, it has lizards—fifteen kinds. It also has one of the most interesting creatures in the world. This is the *tuatara*, the creature with the “third eye.” You can see a picture of a *tuatara* on page 266. He looks like a lizard, but he is not one.

Long ago every *tuatara* had at least one eye on the top of his head as well as two eyes in the usual places. As thousands of years passed, the *tuataras* lost the use of that top eye. It did not work any more. A thin piece of skin grew over it. You can find it under the skin of living *tuataras* today.

The *tuatara* belongs to a very old reptile family. At

one time many of them crept about among earth and rocks, but almost all of them died more than a hundred million years ago. They died out everywhere except in one place. Tuataras, the creatures with the “third eye,” are now found on some rocky islands in the Bay of Plenty.

Would you like to go to New Zealand? The New Zealanders would like to see you. They are a very friendly people who like to greet visitors. We have already met some of them in stories. Now let us see more of this beautiful land and its people.

Some Things to Do by Yourself

1. The story about Kuaka says that Joe was kind. Give proof of this. What kind things did Joe do?
2. The Maoris were fine fishermen and farmers. Can you say why they did not do much hunting?
3. Draw and color a picture of some scene in the story about Kuaka. The picture of a godwit on page 261 will help you.
4. Make a small model of a tuatara out of clay. The picture on page 266 will help you. You will not be able to show the “third eye” because it lies under the skin.

Filling in Spaces

Here is a poem about two birds you read about in this chapter. Copy it on your paper. Can you fill in the missing words? (*Do not write in this book.*)

The — is shy and rather meek,
The poor bird has a twisted —.
The — says, “Come, let’s be friends,
I’ve got a silly beak that bends!”

A CHANGING LAND

Our world is ever changing. Many millions of years ago it was very different from today. For example, water once covered large parts of North America, and Wyoming was on the seashore. There were many other changes before man appeared on the earth.

Far away in the South Pacific Ocean the earth lifted up a long ridge. The land which we call New Zealand appeared above the sea. The ridge broke in one place and sank again. That place is Cook Strait, between North and South Island.

In some places the ridge was lifted up so high that mountains were formed. The Southern Alps came into being that way. These mountains lie like a backbone along the western coast of South Island. They are the tallest mountains in New Zealand, yet they are just a giant fold in the crust of the earth.

There is no grander sight in all New Zealand than the Southern Alps. They are always topped with snow. At least seventeen of their peaks rise 10,000 feet or more above the level of the sea. The tallest, Mount Cook, is 12,349 feet high. It is almost twice as high as Mount Kosciusko, the highest mountain in Australia.

Mount Cook is named for the great explorer James Cook. The Maoris had given it a name like a poem. They called it Aorangi, which means "the one who pierces the clouds." Find it on the map on page 227.

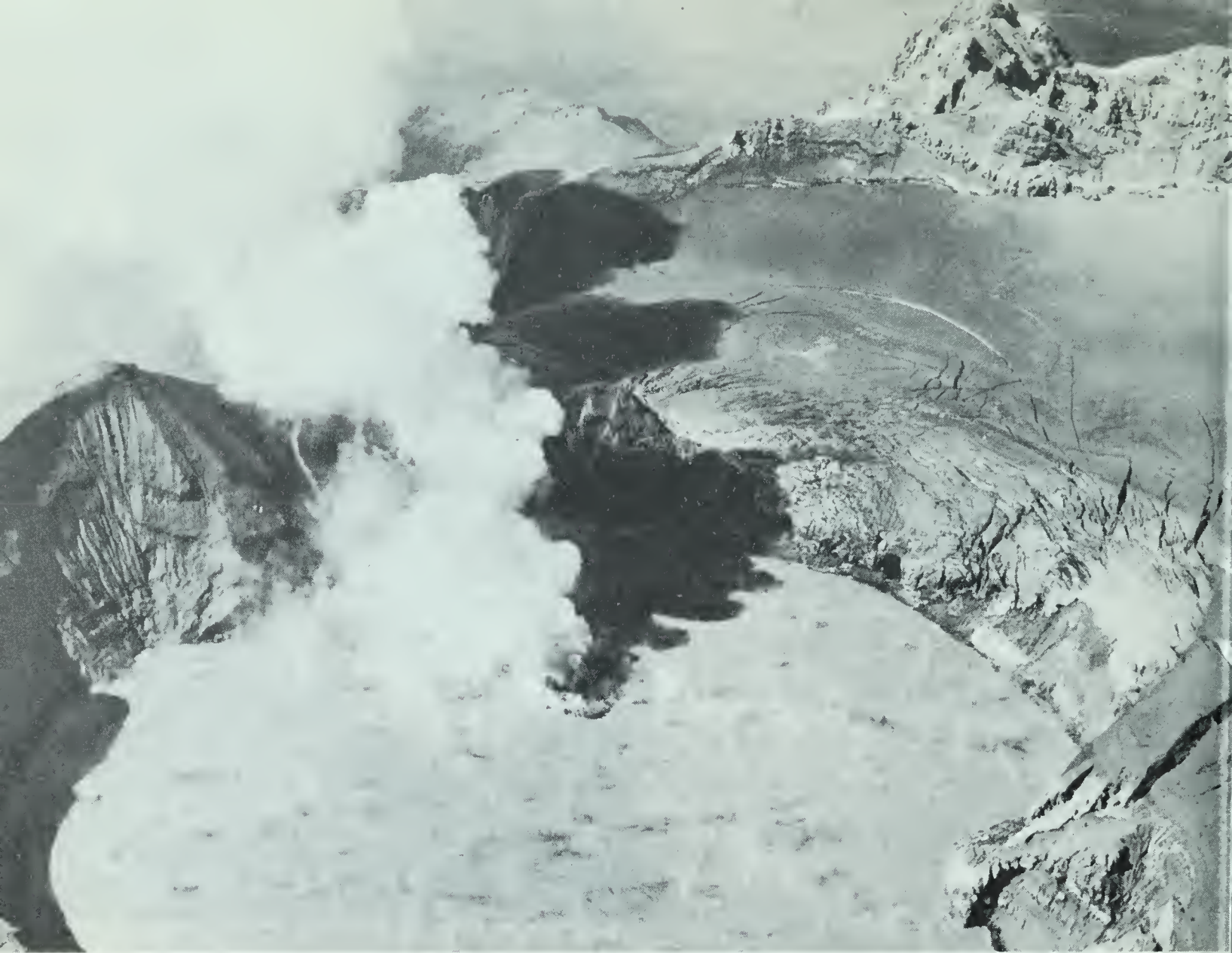
This glacier moves down the Southern Alps much like a very slow river.



High among the peaks are rivers of ice called *glaciers*. One of these glaciers moves down the mountain at the rate of five yards a day. That may seem slow to you, but it is fast for a glacier.

How beautiful are the Southern Alps! The glacier ice sparkles like white fire in the sunshine. Deep, blue lakes lie in high valleys. Streams leap down high cliffs. Ferns and blossoms grow thickly in the forests on the lower slopes.

The Southern Alps of New Zealand are a big playground. People go there on vacation from many lands. Some of the visitors climb the mountains. Some go walking through the valleys. Some row and fish in the high, blue lakes. All love the beauty of the mountains, which you can see for yourself in the pictures in this chapter.



The top of Mount Ruapehu. Around the pool of boiling mud and water is a great sheet of ice.

Mountains That Grew

The Southern Alps were lifted up by the earth. Not all the mountains in New Zealand were formed in this way. Others were built up around volcanoes. We could almost say they grew.

Long ago New Zealand was not the lovely green land we know today. Much of it was a gray desert, an unfriendly place. Volcanoes puffed and smoked and steamed. Time and again they spouted. Huge amounts of melted rock were thrown out of them. Rivers of lava, as red as fire, flowed down the hillsides.

As the lava cooled it became solid. More lava was

added. It piled up to form hills, plateaus, and even mountains. This happened mostly on North Island. A high plateau across the center of North Island is covered with old lava.

Near the middle of this plateau is Lake Taupo, New Zealand's largest lake. North of Lake Taupo is the hot-lakes district that we read about on pages 246-259. South of Lake Taupo is wonderful Mount Ruapehu, a big volcano.

Mount Ruapehu is surely one of the wonders of the world. Snow covers its high slopes even in summertime. Yet right on the top of the volcano is a hot lake! Cliffs of ice lie around the lake, but sometimes the water of the lake is boiling hot, and steam rises above the snowy peak. In the picture on page 274, you can look down on top of this volcano.

Mount Ruapehu, 9,175 feet high, is the tallest mountain on North Island. It has two tall volcano neighbors. They puff and smoke once in a while, reminding us of the heat beneath them.

Long, long ago there were many volcanoes in New Zealand. Most of them are volcanoes no longer. The fires within them seem to have died. Today they are just like ordinary mountains and hills. There are about fifty of these hills around the city of Auckland. But the most famous of the dead volcanoes is Mount Egmont on the western coast. Mount Egmont is famous for its beauty.

New Zealand is not the only country with volcanoes. They are found in many lands, including the United States. As a rule they do little harm.

And now let us leave the mountains of New Zealand and meet some of the people. First let us read the story

of two children who gave their mother a pleasant surprise.

The Children Carry On

"Ken, what's happened?"

Mrs. Garlin rushed out of the farmhouse kitchen. She ran through the rain across the back yard to meet her husband.

Farmer Ken Garlin was walking toward the house. He was covered with mud, and his right arm hung down by his side. He tried to hold it with his left hand.

"My arm," he said. "It's broken. My horse fell and rolled on me."

"Oh Ken!" said Mrs. Garlin as she helped him to the house.

In a moment the Garlin children, Rod and Carrie, learned what had happened. Carrie made her father a cup of tea, which he always loved. Rod raced off on his pony to get the doctor. Then the boy found his father's horse and brought him home.

Soon the doctor's automobile came splashing along the wet farm road. Kind, old Dr. O'Day came in with his cheerful smile. "A broken arm, I hear," he said. "Bad luck. Still, we can mend it, I'm sure."

After looking at the arm, he was not so cheerful. And when he left, he took Farmer Garlin with him. The arm would have to be fixed at the doctor's office.

"I won't keep him long," said Dr. O'Day. "Ken will be home by evening. In time his arm will mend. But I've some bad news for you, Mrs. Garlin. It will be several weeks before Ken can work again."

Poor Mrs. Garlin! After they had gone, she sat down

on a kitchen chair. She was a brave woman, but now she felt lost. It was hard to keep the tears back. "Poor Ken!" she thought. "He'll be so worried. How can we do all the farm work without him? Whatever shall I do?"

If only the children were older! Then they could help with the farm work. But Rod was only eleven and Carrie was younger still. Carrie was ten, and only just ten at that.

Yes, if only the children were older! Mrs. Garlin sighed. The children would be no help. They were always in trouble lately. They were working well at school, but they were making her cross at home. "Oh, what shall I do?" sighed Mrs. Garlin.

"I know, Mother," said Rod, as if he knew what she was thinking. "We can all work the farm together. I can help George with the cows."

Milking with electric machines on a New Zealand dairy farm.

NEW ZEALAND CONSULATE



George was the hired man. He was away with the truck now. He had taken the big cans of milk to the butter factory a few miles away.

"Rod, dear, you're not old enough," his mother said. "I must help George in the dairy. But who'll take care of the house?"

"I will!" cried Carrie, jumping up and down. But Mrs. Garlin shook her head with a sad smile.

Just then the truck drove into the yard. George was back. The children ran out to the veranda to tell him the news. Sitting in her chair, their mother heard them shouting:

"Dad's hurt!"

"Can't work for weeks!"

George wiped the mud from his boots and came into the kitchen. He had big red hands and kind gray eyes. "I'm sorry to hear this, Mrs. Garlin," he said.

"George," said Rod quickly. "Aren't I big enough to help you in the dairy?"

"Sure you are, Bluey," said George. "I started work at your age. You'll make a fine cowspanker!" That was George's way of saying that Rod would make a good dairy farmer. He always called Rod "Bluey" in fun because Rod had red hair.

"George, aren't I big enough to do the housework while Rod and Mother help you?" asked little Carrie with an eager look.

"Sure," said George again. Then he turned to the mother. "Now don't you worry, Mrs. Garlin," he said. "All join in and help. Together we'll keep the farm going."

There was nothing else Mrs. Garlin could do. The

children would have to miss school for a time. Whatever else happened, the farm work must be done. The dairy cows must be milked. Twice every day they must be milked, in the mornings and in the evenings. And oh, there was so much other work to be done, too. The children were eager to help, but she thought they were too young. Surely they were too young.

But each morning, rain or shine, Rod got up before five o'clock to help with the cows. The gentle cream and brown creatures waited in the cow yard. It was cold and dark. Not for hours yet would the sun rise above the Southern Alps.

Rod was as busy as a water beetle. He kept driving cows into the shed for milking. He let them out when they were milked. He did this time and again. At last, forty cows had passed through the shed and were eating their breakfast of hay in a paddock on the other side.

After breakfast George took the milk to the butter factory. Rod drove the cows back to their pastures, and Mrs. Garlin cleaned the dairy. She washed the milking machines and cans with boiling water. And she hosed the floor of the sheds until they were as clean as her own kitchen.

"New Zealand dairy farms are the cleanest in the world," her husband had once said.

Meanwhile Carrie had been busy in the house. She was up and dressed almost as soon as Rod. Her first job was to get the breakfast. And a big one it had to be, for the others came in hungry after the milking.

"My word, Carrie can cook good cereal," said George as he poured cream into his bowl.



NEW ZEALAND CONSULATE

Cattle from a near-by ranch are driven along the coast of the Tasman Sea.

Mr. Garlin helped where he could. But he could not do much because of his broken arm. It was now set stiff in a jacket of plaster. A wire frame held it up and away from his body. The arm must not move until the bone was mended.

In this time of trouble one thing helped the family very much. Like nearly all New Zealand farmers they had electric light and *electric power*. That made the work much easier. Bright lights lit up the farmhouse and dairy. Electric power worked the milking machines, heated the water, warmed the home, and cooked the meals.

"Thank goodness for electricity!" sighed Mr. Garlin.

"Where does it come from, Dad?" asked Rod.

"It comes on wires, silly," said little Carrie, who liked to poke fun at her brother.

But Mr. Garlin explained. "It comes from Lake Coleridge beyond the mountains," he said. "The electric power is made at the lake. Then it is sent along wires to people who buy it. The wires stretch from the top

of one steel tower to another. These towers can be seen on many hills in New Zealand."

"But how is electric power made?" asked Rod.

Mr. Garlin said that New Zealand was lucky to have high mountains and a good rainfall. Water came rushing down the mountain sides in fast streams and rivers. This rushing water was a form of power, which could be changed by machines into electricity.

"Nearly all the electric power used in New Zealand comes from water power," said Mr. Garlin.

Just then a shout came from the dairy. It was a call for Rod. Mrs. Garlin was cleaning the milking machines and needed the boy's eager help.

Every day there was much work to do. The children were busy nearly all of the time. They began to understand how hard their parents had always worked on these cold, wet mornings. Yet it was fun to help. The children learned to do many new things. Young as he was, Rod learned to work the milking machines. Little Carrie learned how to cook. The children themselves were surprised at all the things they learned to do.

One sunny morning Dr. O'Day came to the farmhouse and took a long look at their father's arm. "Fine!" said the doctor. "It's mended. He can use it now."

Before the doctor left, he stood for a moment on the front veranda. He looked over the green paddocks to the deep blue of the Tasman Sea.

"You have a nice farm here, Ken," he said to Mr. Garlin. "And you have a fine pair of children, too. All the neighbors are saying how well they've been helping."

Mr. Garlin patted Rod and Carrie on the shoulders.

And Mrs. Garlin said, "You know, Doctor, I thought they were too young to help. How wrong I was! You'd be surprised at all the things they learned to do. Thanks to Rod and Carrie, we kept the farm going."

The children looked up at her with shining eyes.

The doctor drove away, and nothing more was said. But at supper that evening George, the big hired man, had his turn. "What did I say?" he asked. "All join in and help. That's how we kept the farm going."

All join in and help! That was the best of all the things the children had learned.

Man Changes New Zealand

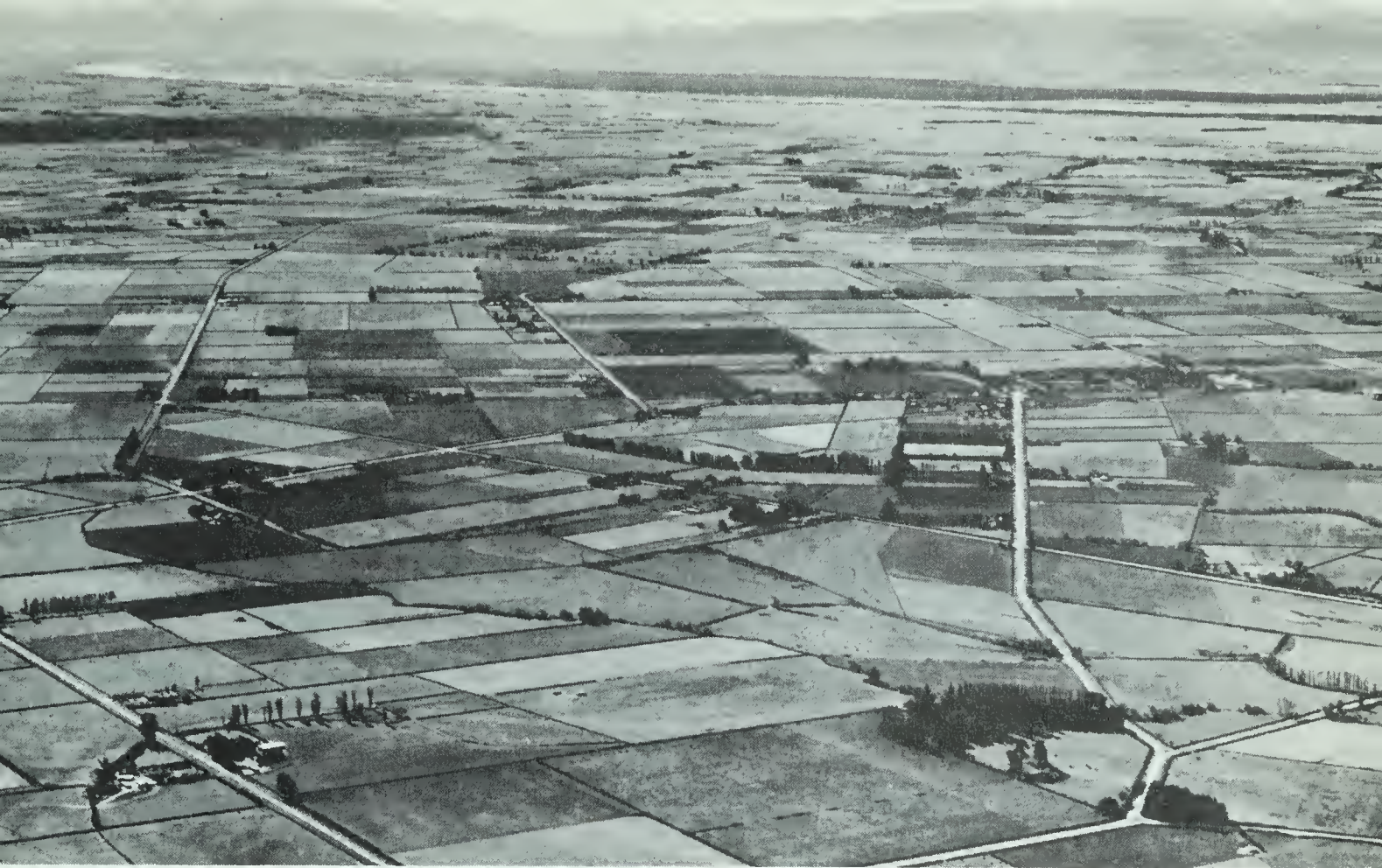
We have just met the Garlin family on their farm. There are many farmers in New Zealand. It is a land of farms.

But it was not always so. Less than one hundred and fifty years ago it was quite different. What did the British settlers find?

They came to a land which had not been changed by man. True, the Maoris were farmers. They grew sweet potatoes and taro, but they could not do much farming. They had no grain, no farm animals, and no steel axes to clear the forests away for fields.

Some of the British settlers went to North Island. Here the lowlands were mostly forest and swamp. The forest was green, and the trees kept their leaves all year round. Ferns and moss covered the forest floor. Vines climbed everywhere among the trees. In many places the forest was too thick to walk through. It seemed no place for farms.

Other settlers went to South Island, the land of the



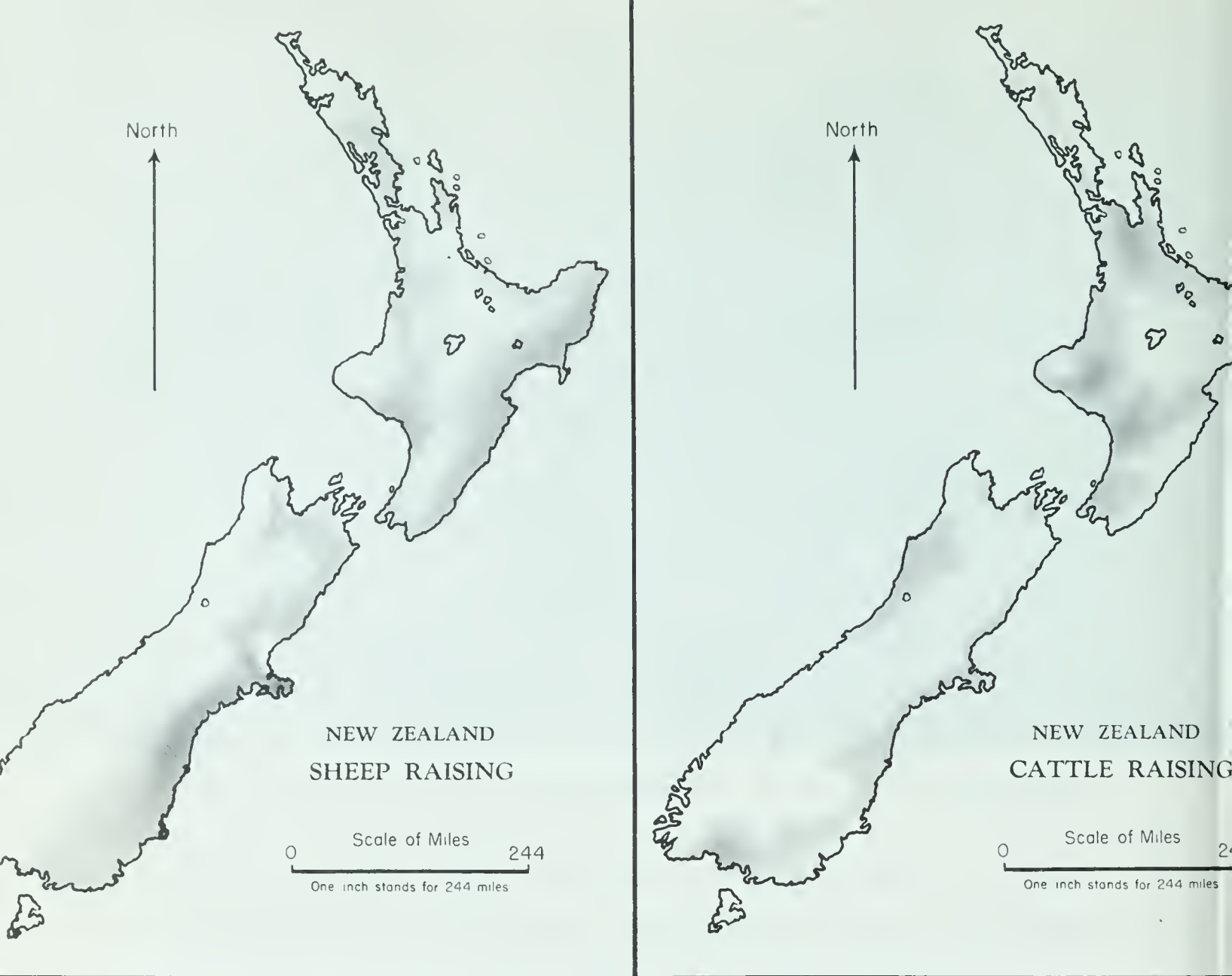
V. C. BROWNE

Canterbury Plains. In the distance are the Southern Alps.

Southern Alps. Mountains seemed to take up most of the island, but on the eastern side were plains. They were not covered with forest but with *tussock grass* like small bushes. No crops had ever been planted there. No animal had ever nibbled at the tussock grass. The plains seemed silent and empty.

What do we see today? Look at the picture on this page and see the Canterbury Plains on the east side of South Island. Everywhere are fields rich with wheat and oats. How different that is from the empty plain the settlers found!

Today we see sheep everywhere along the eastern side of South Island. Lambs grow fat on the Canterbury Plains. Their meat is sent to England. Dairy cows, too, grow fat, and we find fruits that the Maoris never knew. Dry Otago in the south is famous for its apricots. Lovely apples are grown in the north near Nelson.



On North Island the changes are even greater. Where are the forests? Most of them have been cleared away. The swamps have been drained. In place of forest and swamp we see hundreds of smooth, green fields dotted with sheep and cattle.

For its size, New Zealand today has more sheep than any other country. Few other lands produce more wool. New Zealand sheep that are raised for wool live mostly in the hills. Sheep that are raised for meat are found mostly on the plains. On the maps on this page you can see where sheep and cattle are raised.

The dairy farms are even more important. Most of the dairy farms are on North Island. So, too, are most of

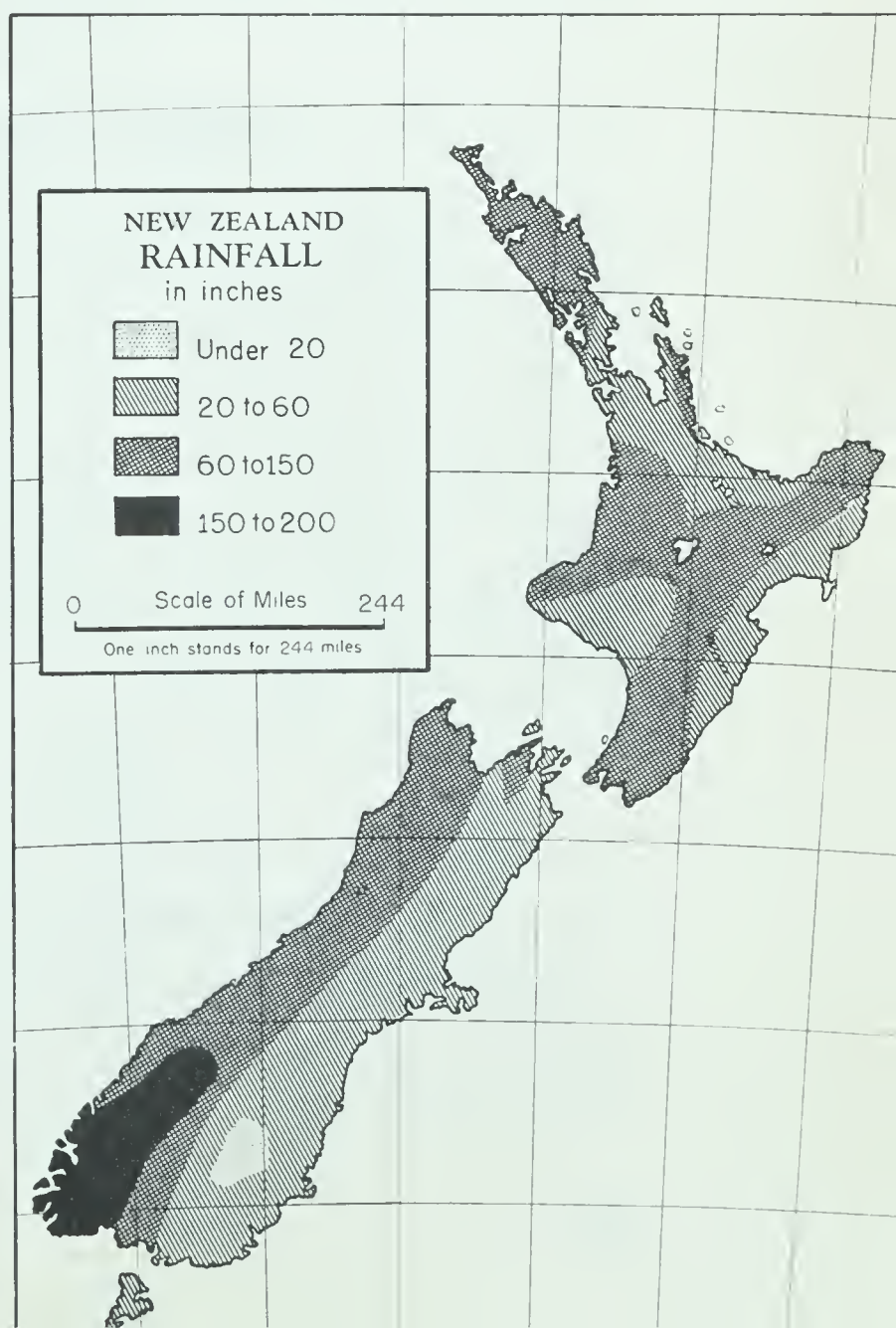
the butter factories, which groups of dairy farmers own. More New Zealanders work on dairy farms than on farms of any other kind.

New Zealand farmers are lucky. Their farms get plenty of rain, as you can see on the map on this page. Drouth is no worry here as it is in Australia.

New Zealand, even in the south, has a mild winter. The farm animals are left out in the fields all year round. They do not need warm barns, and not much winter feed need be grown for them. That saves the farmers work and money.

As we know, New Zealand has a small population. The farmers can easily produce enough food and wool for the New Zealand people. Indeed, only a small part

On this map you can see that the west coast of New Zealand gets far more rain than the east coast.



of the butter, wool, cheese, lamb, mutton, and beef produced in New Zealand is needed there.

What do they do with the rest? They sell it to other lands, mainly to Great Britain. Back come things the New Zealand people need. New Zealand buys machines, automobiles, steel, iron, and oil from other countries.

New Zealand has no great steel mills but it has many small factories. The New Zealanders make their own clothes and the engines for their railroads. They make butter and cheese from dairy milk. They freeze food to keep it fresh on long voyages.

All that has been done since the settlers landed in New Zealand. How surprised they would be to see the New Zealand of today!

Filling in the Spaces

Copy this short history of New Zealand. Fill in the blank spaces with the words below. (*Do not write in this book.*)

About six hundred years ago the first — came to New Zealand. They found it a land with tall — and thick green —. The first white settlers arrived less than two hundred years ago from the —. The white settlers cleared away most of the — and made New Zealand into a land of many small —. Today more New Zealanders work on — farms than on farms of any other kind.

forests
farms

Maoris
dairy

mountains
British Isles

Something to Talk About

Thanks to high mountains and good rainfall, New Zealand finds it easy to get electric power. Explain this statement.

TOMMY SMITH, NEW ZEALANDER

When Tommy Smith was born he was much like any other baby. He was fat and soft and he seemed a bit surprised. He had blue eyes, strong little fingers, and no teeth. His toes were tiny and they turned up. Mrs. Smith was quite sure that Tommy was the most wonderful baby in the world.

But he was not. He was just an ordinary New Zealand baby. That is why it is interesting to meet him. And now let us watch him grow up.

Tommy did not know much at first. Some things were good to feel and taste. Other things made a pleasant noise. People picked him up and made strange sounds. Sometimes he was dipped into warm water and rubbed all over with a sponge.

Very soon a new thing happened. He was taken out-of-doors and along the street to a small house. It was his first visit to the *baby clinic*, a place which helps mothers and their babies. There is a baby clinic in almost every New Zealand town, and it was not strange that baby Tommy should be taken to one.

In the clinic a nurse took a good look at Tommy to make sure he was well. Sad to say, Tommy cried and screamed, but the nurse did not mind. She was used to babies.

“He’s a lovely baby,” the nurse said. Then she told his

mother the best way to take care of Tommy so that he would grow up well and happy.

Months passed, and Tommy grew bigger and stronger. He learned to crawl. He learned to stand. One day he walked! He took two weak steps, and then fell on his face with a yell.

"He walked," his mother cried when his father came home that night. How proud father was! You would think no baby had ever learned to walk before.

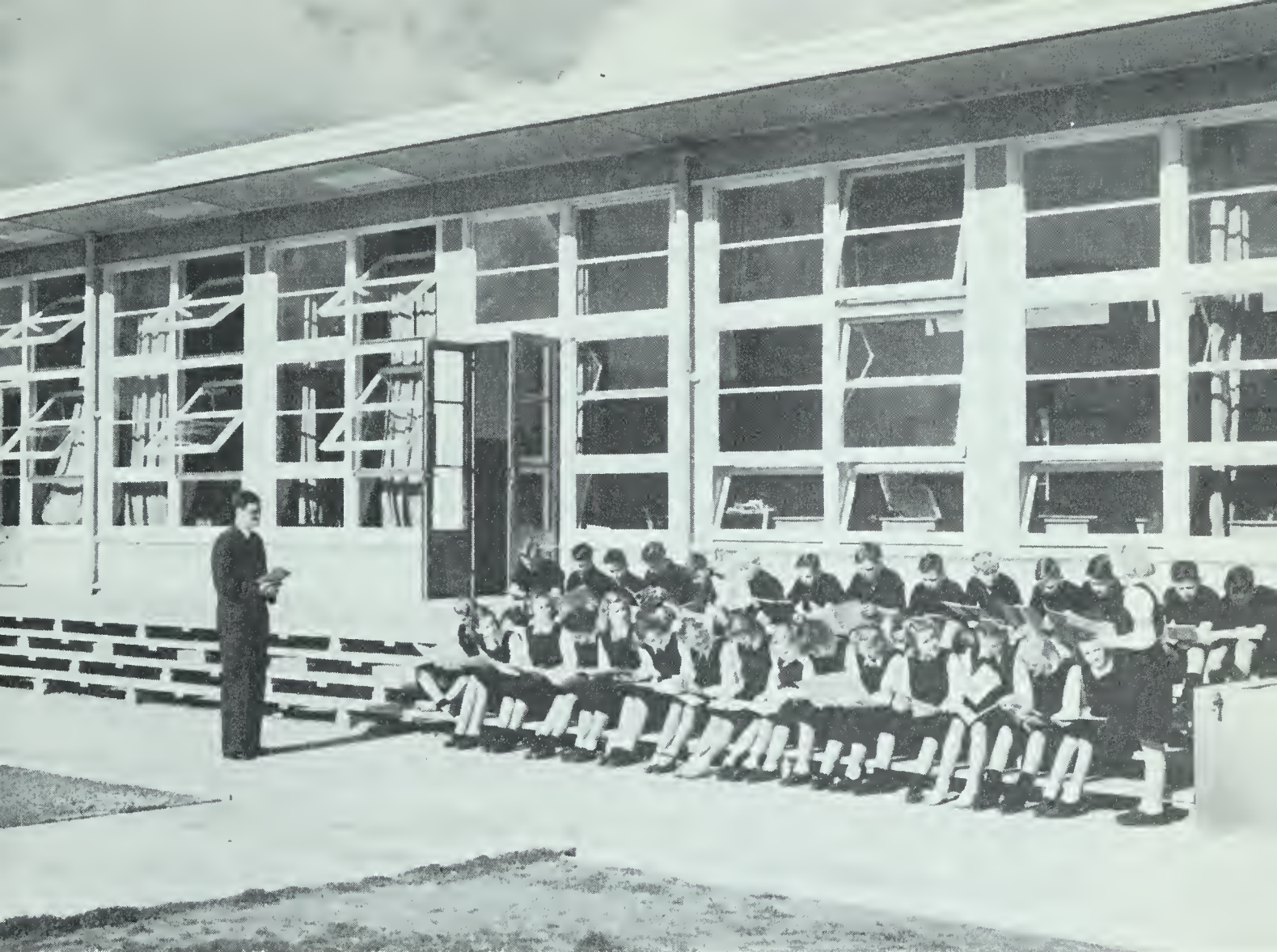
Tommy's father worked on a railroad. He drove a train. But Tommy's first memory of him was in the garden. Like most families in New Zealand, the Smiths lived in a small house with a garden in front of it. Tommy loved to play with his father on the sunny little lawn.

Tommy was not yet old enough to go to school, but he was already strong. This was partly because he got plenty of fresh air, sunshine, and good food. He drank more milk than most children drink in the United States. He ate more meat, too, and more fish. He ate twice as much butter, and he got fresh fruit almost every day.

When Tommy was five, he thought it was a great age indeed. He was old enough for school! His classroom had large windows, which let in fresh air and sunlight even in winter. Often when the weather was fine, Tommy and his friends had lessons in the open air.

Tommy was much like any American boy, but he learned some different things. He did not learn much about the history of the United States, but he did learn a lot about the history of New Zealand.

He did not learn the names of our state capitals. But he did learn the main towns of New Zealand, leading



The new schools in New Zealand are built with many windows to let in the fresh air and sunlight.

off with Wellington, the capital. And, like Australian children, he learned to add money in pounds, shillings, and pence.

Like us, Tommy loved sports. He learned to swim. He played rugby football in the winter. In the summer he played cricket. During some vacations he went fishing with his father. Years ago the New Zealand lakes and streams had only a few big native fish. Then trout eggs were brought from Tasmania, Great Britain, and California. Soon the New Zealand waters were rich with large-size trout. "They find plenty of food here," Tommy's father explained. Tommy soon learned that catching a big trout is fun.

Tommy was good at games. The school helped to make him strong. He was given a free glass of milk at school each day. During the apple season he was given free apples.

Every six months a nurse came to Tommy's school. If any child had a hole in a tooth she filled it. Every few months, too, a doctor came to the school. He made sure that Tommy and the other children were in good health. Often he was in time to prevent a child from becoming badly ill.

Even so, children did fall ill at times. But on the whole they were in better health than most children in other lands. The New Zealand people are among the most healthy in the world.

A few years passed. Now Tommy was a tall boy, as big as his father. New Zealand children go to school until they are fifteen years of age. Tommy was almost fifteen now. He was wondering how he would earn his living.

"I'll be a railroad man like Dad," he said at last.

That is just what happened to Tommy. Today he is a young New Zealand railroad man. He is proud to do such useful work. It is hard work very often, and Tommy is glad he is so strong and fit.

Heroes of New Zealand

At school, we remember, Tommy Smith studied the history of New Zealand. Tommy read about many fine men and women. They were people who tried to make New Zealand a happy place for everyone.

Reading his history book, Tommy learned about the early heroes of New Zealand. Among them were

preachers who went to New Zealand to teach the Maoris about Jesus. Preachers who go to far-off lands to do that are called *missionaries*.

The missionaries who went to New Zealand were brave men. Only brave men would go to live among the Maoris in those days. The Maoris, as we know, were cannibals. And they did not mind whether their dinner had a brown skin or a white one.

The missionaries had to grow their own food, so they began farming in New Zealand. They gave the Maoris some farm animals and grain. They helped them in other ways. Thus the Maoris learned that the missionaries were their friends. The Maoris fought other white men, but they did not hurt the missionaries.

The Maoris listened to their missionary friends. "War," the missionaries said, "is an evil thing." So the Maoris gave up fighting among themselves. They also gave up being cannibals and keeping slaves. They became Christians.

Reading his history book, Tommy learned about the white settlers in New Zealand. The settlers, as we know, made farms. They also set about building towns.

Christchurch, on South Island, was begun by a band of English settlers. They planned it to be like the towns they loved back home. Today Christchurch is a beautiful little city by the winding Avon River. It is a city of parks and gardens and pretty bridges. It is more like an English city than any other in New Zealand.

Dunedin, even farther south, was begun by a band of Scottish settlers. They wanted it to be like the towns they loved back home. Today Dunedin, on the cold hills, is like a Scottish city. The name Dunedin is the old

Scottish word for Edinburgh, the capital of Scotland.

Reading his history book, Tommy learned about the gold rushes to New Zealand. Yes, gold was found in New Zealand as well as in Australia. Tens of thousands of gold diggers rushed to New Zealand between 1860 and 1870. They came from Australia and California and other parts of the world, singing of the gold they hoped to find.

Eager diggers poured into the far southern valleys of Otago, the scene of the first big gold rush. Then more gold was discovered on the rainy west coast of South Island. Gold was also found on North Island among the hills near the Hauraki Gulf. Dreaming of easy riches, men raced to each new find.

Some were lucky. They found a lot of gold. Others came too late. The gold near the top of the ground had already been picked up. Today, as in Australia, most of the mines have to be dug deep into the ground.

Reading his history book, Tommy also learned how

Wellington, the capital of New Zealand, is built on steep hills above Cook Strait.



the New Zealand nation grew. Fine leaders had sometimes shown the way. However, most of the work had been done by men and women like himself. They cleared away forests and built farms and towns. They built a capital, Wellington, on the northern shore of Cook Strait. They built the rich trading city of Auckland in the north. They also built many smaller towns and ports.

New Zealand was a rough, wild land but they did not give up. They built bridges across deep valleys and swift rivers. They built thousands of miles of roads and railroads. In the Southern Alps they dug the Otira railroad tunnel, five and a half miles long, the longest tunnel in the southern half of the world.

Through the years they made farms, built towns, and built bridges over rivers. They changed the wild bush of New Zealand into a wonderful land. Thus the nation grew.

Tommy and the Nation

As a railroad man, Tommy often has to work on Sunday mornings. From the train he sees people going to church. Most of the New Zealand people belong to the same churches as their fathers did in Britain.

Tommy belongs to a church and he is also a member of a *trade union*. There are many trade unions in New Zealand and Australia. Trade unions are formed when workers join together to get higher wages and to make their work more pleasant.

Like other New Zealanders who are twenty-one years old or more, Tommy helps to choose the government of his country. He votes for people who he believes will

make good laws. Like Australia, New Zealand has a Parliament.

If Tommy were a Maori he would be able to vote just the same. He would vote for a Maori member of Parliament. In the New Zealand Parliament there are always four Maoris chosen by the Maori people. Some of the best lawmakers in New Zealand have been Maoris.

New Zealand, like Australia, has a king. He is the same king as Australia has—the King of England and other British countries. However, this does not mean that New Zealand is a colony. Like the Australians, the New Zealanders are a free people. They rule themselves.

Both North Island and South Island are ruled from Wellington, where the New Zealand Parliament meets. So are little Stewart Island in the far south and the tiny Chatham Islands, 540 miles to the east. All those islands are a part of New Zealand.

The Government of New Zealand also rules some other islands in that part of the world. Some of them form the western part of Samoa. The eastern part of Samoa is ruled by the United States. Samoa will some day be ruled by its own people.

Like Australians, the New Zealanders have their own flag, stamps, and coins. The New Zealand flag is like the Australian flag, except that it has four stars instead of six. In each case the stars stand for the Southern Cross, that beautiful group of stars in the Southern sky.

Like the Australians, the New Zealanders have their own Army, Navy, and Air Force. During World War I the New Zealand and Australian soldiers fought side by side as in one army. It was called the Australian and New Zealand Army Corps. The first letters of that name



Plowing by machine in a valley of the snowy Alps.

spell *Anzac*, and to this day Australian and New Zealand soldiers of that army are often spoken of as Anzacs.

New Zealand and Australia are sometimes called the Anzac countries. But more often they are spoken of as Down Under. You can see on any globe that the northern countries are always drawn on the upper part of the globe. The southern countries are always drawn on the

under part of it. Of course there is no upper part or under part to the world, just as there is no top or bottom to a ball. *Up* means away from the center of the earth, and *down* means toward the center of the earth. However, people in the northern countries often speak of New Zealand and Australia as The Lands Down Under.

Tommy Makes a Promise

As a railroad man, Tommy Smith sees much of New Zealand. He drives trains from city to city. Every year he travels thousands of miles to and fro across the country.

The country changes with the seasons. Tommy loves to watch the changes. The fruit trees blossom in the spring. The crops turn yellow in the summer. In the fall the oaks, willows, and other English trees drop their leaves and stand bare against the sky.

Many English trees grow in New Zealand fields. They were planted by the British settlers. And there is much else that came from Britain. The fields and hills are planted with English grass, which makes good pastures. English flowers grow in the gardens. English sparrows twitter in city streets. There are even English foxes and rabbits among the ferns.

Sad to say, the foxes and rabbits are a pest in New Zealand as in Australia. Another pest is the deer! Many years ago a few deer were brought to New Zealand from Europe, Asia, and North America. They were let loose in the bush. "Now we'll have some sport," hunters said.

It was the deer that had the fun. New Zealand, it turned out, was just the place for them. They took to the

hills and found food everywhere. Soon there were hundreds of deer. Then there were thousands.

Deer are beautiful to watch as they go leaping through the bush. However, thousands of deer can do much harm. Tommy often sees hillsides where deer have eaten away all the grass. The ground is bare, and rain and wind have carried the soil away. That is soil erosion. Too many deer harm the soil, just as too many rabbits do, or too many sheep.

Another cause of erosion has been the loss of so much

You can see in this picture where the soil has been washed from a hillside by the rain.



forest. The settlers cleared away forests to make fields. This was good and yet it brought trouble too. Fallen leaves and moss beneath trees keep rain from washing away the soil. When forests are cut away, much soil can be lost before grass can get a start.

Some New Zealand hills, once covered with green trees and bushes, have been badly eroded. Today these hills are bare. The trees are gone. The bushes are gone. Much of the soil is gone. All that remains are brown, rocky slopes, down which water rushes after rain.

Those wasted hills make Tommy sad. The New Zealand people know that their country has been harmed. Now, like the Australians, they are fighting soil erosion. They are shooting many deer. They are taking care of the forests that remain. They are doing other things to save the soil.

From his train Tommy sees eroded hills. But the other things which he sees are good. Farms are green in the valleys. Crops grow ripe on the plains. And in rich fields the sheep and cattle feed.

Here is a green and pleasant land. It was the people who made it so. That, Tommy knows, was never easy. There were troubles in the past. He has read of them in his history books. There are troubles today, such as soil erosion. No doubt there will be troubles in the future.

But Tommy is not afraid. He knows the New Zealand people. They are kind and brave. They are hard-working and friendly. They want everyone to have a pleasant, useful life.

Tommy Smith of New Zealand makes a silent promise to himself. He will help to make his country a happy land for all.

Making a List

From the words below, make two lists. In one column write the words that tell about Australia, and in the other column, write the words that tell about New Zealand.

broad

wet

low mountains

dry

flat

tall, snowy mountains

cool

long

hot

Something to Write About

1. What New Zealand picture do you like best in this book?

2. Why did Tommy Smith grow up to be strong? Here is one reason: Tommy got plenty of fresh air. Write down three more reasons.

Questions to Answer

1. What is the capital of New Zealand?

2. Why are deer a pest in New Zealand?

Sentences to Finish

Copy these sentences and fill in the blank spaces with the words below. (*Do not write in this book.*)

1. The ___ told the Maoris that it was wrong to make war.

2. A place that helps mothers and their babies is called a ___.

3. In New Zealand, gold is dug out of river beds by machines called___.

4. Workers join together in ___ to get higher wages and to make their work more pleasant.

5. Australia and New Zealand are sometimes spoken of together as ___.

dredges

missionaries

trade unions

Down Under

baby clinic

Appendix

To save space in this appendix we have shortened some words. Instead of writing "The United States of America" each time, we have used the letters USA. Here are some other words which have been shortened:

New South Wales, NSW; Victoria, Vic; Queensland, Q'land; South Australia, SA; Western Australia, WA; Tasmania, Tas; New Zealand, NZ; North Island, NI; South Island, SI; mountain, Mt.

| | <i>Australia</i> | <i>New Zealand</i> | <i>United States</i> (not counting Alaska) |
|--|------------------------------|---------------------------|--|
| Area (in square miles) | 2,974,581 | 103,415 | 3,022,387 |
| Tallest Mountains (in feet) | Mt. Kosciusko (NSW) 7,328 | Mt. Cook (SI) 12,349 | Mt. Whitney (Calif.) 14,495 |
| Volcanoes (in feet) | Only dead volcanoes | Mt. Ruapehu (NI) 9,175 | Lassen Peak (Calif.) 10,453 |
| Longest Rivers (in miles) | Murray River 1,609 | Waikato River (NI) 220 | Mississippi- Missouri River 3,988 |
| Forest Areas (in square miles) | 119,400 | 15,800 | 720,400 |

AUSTRALIA AND ITS TERRITORIES

The Commonwealth of Australia is made up of New South Wales, Victoria, Queensland, South Australia, Western Australia, Tasmania, the Northern Territory, and the Australian Capital Territory which is a small area set aside, like the District of Columbia, for the national capital.

Ruled by Australia

| | |
|-------------------------|-----------------------------------|
| Papua (in New Guinea) | A number of tiny islands |
| Territory of New Guinea | Australia, New Zealand, and Great |
| Norfolk Island | Britain rule Nauru Island |

NEW ZEALAND AND ITS TERRITORIES

New Zealand is made up of North Island, South Island, Stewart Island, and the Chatham Islands (about 500 miles east of SI).

Ruled by New Zealand

| | |
|-------------------|-----------------------------------|
| Auckland Islands | Cook Islands |
| Campbell Islands | Western Samoa |
| Antipodes Islands | A number of tiny islands |
| Kermadec Islands | New Zealand, Australia, and Great |
| | Britain rule Nauru Island |

POPULATION *

| <i>Australia</i> | <i>New Zealand</i> | <i>United States</i> |
|-------------------|--------------------|----------------------|
| 8,000,000 whites | 2,000,000 whites | 150,000,000 |
| 60,000 aborigines | 100,000 Maoris | (all people) |

Australian States and Capital Cities

| | | | |
|--------|-----------|-----------|-----------|
| NSW | 3,100,000 | Sydney | 1,550,000 |
| Vic | 2,150,000 | Melbourne | 1,250,000 |
| Q'land | 1,240,000 | Brisbane | 450,000 |
| SA | 700,000 | Adelaide | 400,000 |
| WA | 535,000 | Perth | 300,000 |
| Tas | 275,000 | Hobart | 90,000 |

In addition there are about 11,000 people in the Northern Territory (3,000 at Darwin); and 22,000 people in the Australian Capital Territory (20,000 at Canberra).

New Zealand Islands

| | | |
|----------------|----------------------|----------------|
| North Island | 1,250,000 whites and | 100,000 Maoris |
| South Island | 650,000 whites and | 3,000 Maoris |
| Stewart Island | 500 whites and | 100 Maoris |
| Chatham Island | 1,000 whites and | 400 Maoris |

Largest New Zealand Cities

| | | | |
|----------|------------|--------------|---------|
| Auckland | Wellington | Christchurch | Dunedin |
| 300,000 | 210,000 | 175,000 | 105,000 |

* The population figures are not exact. They are *approximate*, which means nearly exact.

Glossary

This glossary tells you the meaning and pronunciation of many of the words in this book. These hard words are divided and spelled the way they should be pronounced. The marks on the letters in the following list stand for different sounds. The words in the list tell you the sounds meant by the different marks.

| | | |
|--------------|---------------|-------------------|
| ā as in tāke | ẽ as in rivěr | û as in bûrn |
| â as in câre | ī as in fīnd | ōō as in sōon |
| ǎ as in mǎn | ĩ as in hĩm | oo as in bōok |
| à as in àsk | ō as in gō | oi as in oil |
| ä as in fär | ǒ as in bǒx | ou as in out |
| á as in sofá | ô as in fôr | th as in bath |
| ē as in mē | ū as in ūse | th as in bathe |
| ě as in sět | ũ as in bŭt | zh as in pleasure |

A

aborigines (ăb'ō-rīj'ĩ-nē): black-skinned people native to Australia,
5

Adelaide (ăd''l-ād): capital city of South Australia, 29, 31, 50,
130, 132, 137, 210

airport (âr'pōrt): a place where airplanes land, 127

Albany (ôl'bá-nĩ): a seaport in Western Australia, 29, 50, 60, 62

Alice Springs (ăl'is sprĩngz): a town in the Center of Australia,
130-131, 133, 137

alligators (ăl'ĩ-gā'tēr): reptiles with tough skin, long jaw, and big
teeth, 94

America; see **United States**

Antarctica (ănt-ărk'tĩ-ká): continent at the south pole, 34

Anzacs (ăn'zăk): a name given to Australian and New Zealand
soldiers, 295

aphides (ā'fīdz): plural of aphis, 97
aphis (ā'fīs): a small insect, 97
archer fish (är'chēr fīsh): a fish that shoots drops of water from its mouth, 91
architect (är'kī-tēkt): a man who plans buildings before they are built, 204
Arnhem Land (är'nēm): part of the Northern Territory set aside as a home for the aborigines, 127
artesian basins (är-tē'zhăn): underground stretches of rock or clay, 145
artesian water (är-tē'zhan): water held in artesian basins, 145
Auckland (ôk'länd): seaport on North Island, 246, 275, 293
Australian Alps (ôs-träl'yăn älp): part of the Eastern Highlands of Australia, 42-43, 146

B

baby clinic (bā'bī klīn'īk): a place which helps mothers and their babies, 287
bale: large bundle of goods, 165
Ballarat (bäl'ā-răt): gold-mining city in Australia, 175, 178
bamboo (bām-bōō'): large grass-like plant, 125
barb (bärb): part of a fishhook that extends backward from the point, 226
barracuda (bär'ā-kōō'dā): a savage salt-water fish, 91
barrier (bär'ī-ēr): something that stops people or things from moving forward, 101
basins (bā's'n): areas lower than the surrounding land, 144
Bathurst (bäth'ûrst): gold- and silver-mining town in Australia, 172, 175
Bay of Plenty (bā öv plēn'tī): a bay on the north coast of North Island, 252
bellbirds: Australian birds with lovely songs, 88
Bendigo (bēn'dī-gō): gold-mining town in Australia, 175
bight (bīt): a long curve, 49
black widow: a poisonous American spider, 100
black swan: a swan with black feathers and a red beak, 87
Blue Mountains (blōō moun'tīnz): part of the Eastern Highlands of Australia, 24-26, 37, 42, 172
boomerang (bōōm'ēr-äng): hunting tool used by the aborigines, 106
bores (bōrz): small holes drilled deep into the ground, 145
bower (bou'ēr): a hall made of sticks and leaves, 82

bowerbird (bou'ēr-bûrd'): an Australian bird, 82
breakers (brāk'ērz): waves that curl over and fall, 9
breed (brēd): a kind or family of animals, 198
Brisbane (brīz'bān): capital city of Queensland, 29, 31
Broken Hill (brō'kēn hīl): mining area in Australia, 202–203
broilgas (brōl'gāz): dancing birds of Australia, 83
bunyip (būn'yīp): an unfriendly ghost, 118
burrows (būr'ōz): holes in the ground, 75
bush (boōsh): most of the land outside the cities and towns of Australia, 2
bush fires: forest fires, 191

C

cage: elevator in a mine, 186
Canada (kān'ā-dā): a British dominion, 208
Canberra (kān'bēr-ā): city in Australian Capital Territory, 31, 206–207
cannibals (kān'ī-bālz): human beings that eat human flesh, 228
Canterbury Plains (kān'tēr-bēr'ī plānz): a large plain in New Zealand, 283
Cape York (kāp yōrk): northernmost part of Australian continent, 33
Captain Cook: a famous British explorer, 18, 235
Carnarvon (kār-nār'vūn): a town in Western Australia, 158
Center: the center of Australia, 129–131
Chatham Islands (chāt'ām ī-lāndz): a group of islands east of New Zealand, 294
China (chī'nā): a country in east Asia, 263
Christchurch (krīst'chûrch): city on South Island, 291
claim: an area taken by a settler or miner, 177
clippers (klīp'ērz): fast sailing ships, 176
coastal plain (cōs'tāl plān): a plain along a coast, 43
cockatoos (kōk'ā-tōōz'): birds like large parrots, 84
colony (kōl'ō-nī): a place where the people do not make their own laws, 21
commonwealth (kōm'ūn-wēlth): a group of people making up a state or nation, 29
Commonwealth of Australia (ōs-trāl'yā): all the states in Australia, 29
continent (kōn'tī-nēnt): a very large piece of land, 34

convicts (kǒn'vīkts): people in jail for breaking laws, 21
Cook Strait (kōōk strāt): a body of water between North and South Island, 236, 272, 293
coral (kǒr'āl): the shell outside the polyps, 102
corroboree (kǒ-rōb'ō-rē): an aboriginal party, 114
cranes (krānz): tall wading birds, 83
crocodile (krōk'ō-dīl): largest reptile in Australia, 93
crust: the surface layer of the earth, 252
current (kûr'ënt): a movement in the sea, 228

D

Darling River (där'ling): the largest river that joins the Murray River, 39
Darwin (där'wīn): seaport, capital of Northern Territory, Australia, 31, 127, 130, 137
Deeral (dēr'āl): town in Queensland in the wettest part of Australia, 46
degree (dē-grē'): a measurement for temperatures, 48
desert pea (děz'ērt pē): a flowering desert plant in Australia, 130
diggers (dīg'ērz): men who dig for gold, 177
digging stick (dīg'ing stīk): digging tool used by aborigines, 113
dingo (dīng'gō): Australian wild dog, 76
down (doun): toward the center of the earth, 296
drouth (drouth): a long period of dry weather, 139
dry, the: the season of little or no rain in Australia, 125
dugong (dōō'gōng): sea animal found around Australia, 92
Duniden (dūn-ē'd'n): a city on South Island, 291

E

earthquake (ûrth'kwāk'): a movement of the earth's crust, 249
Eastern Highlands: hills and mountains on the east coast of Australia, 42
echidna (ē-kīd'nā): a marsupial with spikes on its back, 74
electric power (ē-lēk'trīk pou'ēr), 280
emu (ē'mū): the largest bird in Australia, 78
Endeavor (ën-dēv'ēr): James Cook's ship, 18
England (īng'gländ); *see* Great Britain
equator (ē-kwā'tēr): an imaginary line that divides the world into two parts, 7
eroded (ē-rōd'ēd): worn away, 152
erosion (ē-rō'zhūn): moving away soil by wind or water, 152

Eureka Stockade (ū-rē'ká stōk-ād'): gold miner's fort in Victoria, 178, 180-181, 189
Europe (ūr'ūp): a small continent, 34, 43, 87
explorers (ěks-plōr'ěrz): people who go to places where men have not gone before, 24
Eyre, Edward John (âr): first explorer to cross Australia, 40, 50-63

F

fleece (flēs): wool that has been cut off a sheep, 164
flounder (floun'dēr): a salt-water flatfish, 91
forester (fōr'ēs-tēr): a man who takes care of forests, 191
Fowler's Bay (foul'ěrz bā): a bay on the Great Australian Bight, 50
Fremantle (frē măn't'l): seaport town for Perth, 165

G

Gascoyne River (gās'koin): river in the northern part of Western Australia, 157
geyser (gī'zēr): a spring which throws up hot water and steam, 248
glaciers (glā'shēr): rivers of ice, 273
goanna (gō-ăn'ă): largest Australian lizard, 95
gold field: a place where much gold is found, 171
gold rush: when many people go to look for gold, 171
Golden Mile: gold-mining area in Kalgoorlie, 184-185
government (gŭv'ěr-n-měnt): men who make laws for a state or nation, 178
Great Australian Basin (grāt ôs-trāl'yăn bā's'n): very large artesian basin, 144
Great Australian Bight (bīt): wide bay along the southern coast of Australia, 49, 50, 151
Great Barrier Reef (băr'ĩ-ēr rēf): a line of broken rocks and islands off the eastern coast of Australia, 101
Great Britain (grāt brīt'n): England, Scotland, and Wales, 13, 20-23, 28, 198, 207-208, 230, 286
gum tree (gŭm): a tree that sheds its bark instead of its leaves, 3

H

haka (hă'kā): a dance of Maori fighters, 240
harbor (hăr'bēr): a body of water where ships are sheltered from storms, 16
hardwood (hărd'wōod): heavy, strong wood that is hard to cut, 193

Hauraki Gulf (hou-răk'ĩ gulf): a bay on the north coast of North Island, 292
Hawke's Bay (hôks): bay on the east coast of North Island, 226
Healesville (hēlz'vīl): town east of Melbourne, Australia, 68
Hero (hēr'ō): a small sailing ship that carried mail for Eyre, 50
Hobart (hō'bărt): capital city of Tasmania, 31
homesteads (hōm'stēdz): homes on stations in Australia, 133
honey ants (hūn'ĩ äntz): ants whose bodies contain honey, 113
Hume Dam (hūm): a dam across the Murray River, 146

I

iguana (ĩ-gwă'nă): lizard of the Americas, 95
Indian Ocean (ĩn'dĩ-ăn): ocean between Australia and Africa, 34
inland (ĩn'lănd): part that is not near the ocean, 4
Iron Monarch (mōn'ērċ): a hill in South Australia, 201
iron ore (ōr): an earth material that contains iron, 210
irrigation canals (ĩr'ĩ-gă'shūn ka-nalz): ditches that supply fields with water from rivers, 147

K

Kalgoorlie (kăł-gōor'li): gold-mining town in Western Australia, 183–185, 190
kangaroo (kăng'gă-rōō'): a leaping marsupial of Australia, 2
karri (kăr'ĩ): one of the tallest gum trees in Australia, 193
katipo (kă'tē-pō): a poisonous black spider of New Zealand, 270
kegs (kěgz): small wooden barrels, 52
kiwi (kē'wī): New Zealand bird that cannot fly, 267
koala (kō-ă'lă): small marsupial that looks like a teddybear, 69
kookaburra (kōōk'ă-būr'ă): laughing bird of Australia, 2
Kosciusko, Thaddeus (kōz'ĩ-ūs'kō): a young Polish soldier, 43–44
kuaka (kou'kă): Maori word for godwit, 263

L

Lake Eyre (âr): a dry salt lake in Australia, 41
Lake Rotomahana (rō'tō-mă'hă-nă): lake on North Island, 254, 258
landing field (lănd'ĩng fēld): a level space on which airplanes land, 136
lava (lă'vă): ashes and melted rock, 254
lead (lēd): a heavy metal, 203
lizards (lĩz'ērdz): four-legged reptiles, 94
lovebirds (lŭv'bŭrdz): small, green parrots, 88

lyre (līr): a harp, 82

lyrebird (līr'bûrd): Australian bird with tail shaped like a lyre, 81

M

magpie, Australian (măg'pī): black and white bird, 84

mallee (mäl'ē): small, thin gum trees, 132

mangrove (măng'grōve): a tree that grows in swamps, 91

Maoris (mä'ō-rī): brown people of New Zealand, 228

Marble Bar (mār'b'l bār): hottest town in Australia, 48

marsupial (mār-sū'pī-ăl): an animal that has a pouch for carrying its young, 66

marsupial mole (mōl): mole with a pouch, 73

Melbourne (mēl'bērn): city in Victoria, 29, 31, 87, 200, 210, 213

Mercury Bay (mûr'kû-rī): bay in North Island, 236

Merinos (mě-rē'nōz): breed, or family of sheep, 198

mimic (mīm'ik): to copy a thing or person, 78

missionaries (mīsh'ün-ēr'iz): preachers who go to far-off lands, 291

moa (mō'ā): large bird that once lived in New Zealand, 269

Mount Cook (kōōk): tallest mountain in the Southern Alps, 272

Mount Egmont (ĕg'mōnt): dead volcano in New Zealand, 275

Mount Kosciusko (kōz'ī-ūs'kō): highest mountain in Australia, 43, 146, 272

Mount Ruapehu (rōō'ā-pā'hōō): tallest mountain on North Island, 275

Mount Tarawera (tä'rā-wā'rá): volcano on North Island, 254-258

mountain ash (moun'tīn āsh): tallest of gum trees in Australia, 193

mud skipper (mūd skīp'ēr): fish that climbs trees, 91

mulga (mül'gā): small, gray tree in Australia, 128

Murray River (mûr'ī): the chief river of Australia, 37, 146-147, 210

mustering (mūs'tēr-īng): rounding up sheep, 159

N

native (nā'tīv): born in, 71

native cat: a marsupial of Australia, 71

Newcastle (nū'kàs'l): factory city in New South Wales, 201

New Guinea (gīn'ī): island north of Australia, 33, 263

New South Wales (wālz): state in Australian Commonwealth, 18, 22, 26, 29, 31, 38, 144, 151, 172, 177, 199, 210-202

New Zealand flax (flăks): a bush from which thread for cloth is made, 239

nippers (nīp'ērz): sharp claws, 103

North Island (nôth ī'lănd): most northern of the three main islands of New Zealand, 226, 229, 231, 252, 275, 282, 284

Northern Territory (těr'ĩ-tō'rĩ): a large area in northern Australia, 31, 127

nugget (nŭg'ět): a lump of gold, 175

Nullabor Plain (nŭl-ă'bôr): a plain along the southern coast of Australia, 42

O

opossum (ō-pös'ŭm): a marsupial of America, 70

Otago (ō-tă'gō): a district on South Island, 283

Otira (ō-tēr'ă): village in the Southern Alps, New Zealand, 293

P

paddocks (păd'ŭkz): pastures enclosed by fences, 159

pakeha (pă'kă-hă): Maori name for all white men, 243

parkland (părk'lănd): area of grass and scattered gum trees, 126

Parliament (păr'li-měnt): the group of lawmakers of Australia, 206

Parliament House (păr'li-měnt houz): where the lawmakers meet, 206

parrots (păr'ŭtz): bright-feathered bird of Australia, 84

Perth (pŭrth): capital city of Western Australia, 29, 31, 87, 165, 183, 210

pests (pěsts): animals that give trouble, 67

Philippine Islands (fil'ĩ-pēn): a group of islands north of Australia, 263

pike (pik): salt-water fish with a pointed head, 91

plateau (plă-tō'): a high plain, 43

platypus (plăt'ĩ-pŭs): web-footed, duck-billed animal of Australia, 2

poi (pō'ē): Maori dance, 240

pois (pō'ēz): balls used in the poi dance, 240

polyps (pŏl'ipz): tiny sea animals, 101

port (pōrt): a place where ships load and unload goods, 127

Port Kembla (kěmb'lă): factory city in New South Wales, 201

Port Philip Bay (fil'ip): harbor of Melbourne, Australia, 213

possum (pös'ŭm): tree climbing marsupial of Australia, 69

pouched mice (poucht): mice with pouches, 73

pouches (pouch'ēz): pocket in the fur of a marsupial, 66

prey (pră): any hunted creature, 96

professor (prō-fěs'ēr): a teacher, 247

python (pī'thŏn): large snake, 96

Q

- quailthrush** (kwāl'thrüş): shy bird of Australia, 88
Queensland (kwēnz'länd): state in Australia, 31, 46, 77, 101, 144, 199, 210

R

- rainfall** (rān'fôl): all the rain that falls in one place in a certain time, 45
range (rānj): a row of mountains, 43
red-back (rēd'bäck): poisonous spider of Australia, 100
reef (rēf): ridge of rocks in the sea, 101
reptiles (rēp'tīlz): land animals that have lungs and cold blood, 93
ridge (rij): mountain top shaped like a tent, 24
Rotorua (rō'tō-rōō'ā): chief town in the hot-pools district of New Zealand, 247, 252
rust (rüst): a plant disease that spoils wheat, 148

S

- Samoa** (sā-mō'ā): group of islands north and east of New Zealand, 294
sealers (sēl'ērz): men who hunt seals, 243
seaweed (sē'wēd): sea plant, 92
seed drill (sēd drīl): machine that plants seeds, 195
settlers (sēt'lērz): people who go to a new place to live, 26
shrikes (shrik): a family of birds, 85
Siberia (sī-bēr'ī-ā): northeast Asia, 263
softwood (sōft'wōd): wood that is light and soft, 193
soldier crabs (sōl'jēr krăb): very small crabs, 104
South Australia (south ôs-trāl'yā): state in Australia, 31, 201
South Island (south ī'länd): central and largest island of New Zealand, 226, 231, 272, 282
Southern Alps (sũth'ērn ālps): mountain range on South Island, 272-274, 293
Southern Cross (sũth'ērn krôs): five stars in the form of a cross, seen only in the southern hemisphere, 179
spearthrower (spēr'thrō'ēr): a short, flat stick with a hook at the end, 106
spinifex (spīn'ī-fēks): a dry grass, 130
Spirits Bay (spīr'itz): bay at the tip of North Island, 264
station (stā'shũn): Australian sheep or cattle ranch, 128

Stewart Island (stū'ěrt): an island south of South Island, 226, 294
stock (stōk): name given to sheep and cattle, 128
stockade (stōk-ād'): rough fence around a camp, 180
stockmen (stōk'měn): men who take care of stock, 128
Stone Age (stōn āj): an age when men used simple tools and weapons made of stone, 113
strait (strāt): a narrow part of the ocean between two larger parts, 33
surf (sûrf): breaking waves, 9
surfboat (sûrf'bōt): a rowboat used by lifesavers, 9
surfing (sûrf'ing): swimming in breakers, 9
swamp (swōmp): space of ground that is usually wet, 91
swordfish (sōrd'fīsh): fish with a swordlike beak, 91
Sydney (sīd'nī): capital city of New South Wales, Australia, 16, 19, 21-22, 24, 29, 31, 45, 172, 200
Sydney Harbor (hār'bēr): the harbor at Sydney, 16, 18

T

taro (tä'rō): a root plant eaten by the Maoris, 240
Tasman, Abel (täz'mān): a Dutch explorer, 235
Tasman Sea (täz'mān): sea between Australia and New Zealand, 229, 236
Tasmania (täz-mā'nī-ā): island state south of Australia, 29, 31, 34, 45-47, 72, 235, 289
Tasmanian Devil (täz-mā'nī-ān dēv'l): a fierce marsupial, 72
Tasmanian Wolf (täz-mā'nī-ān wōolf): a large marsupial, 72
tattooed (tä-tōōd'): with a picture pricked into the skin, 239
temperature (tēm'pēr-ā-tūr): tells how hot or cold a place is, 48
termites (tūr'mītz): small insects that eat wood, 98
territory (tēr'ī-tō'rī): a space of land, 31
tide (tīd): the regular rise and fall of the sea, 104
tiger snake (tī'gēr snāk): a yellow snake with dark stripes, 96
Timor Sea (tē'môr): sea between Australia and the islands north of Western Australia, 151
Torres Strait (tôr'ēs strāt): strait between Cape York and New Guinea, 33
trade union (trād ūn'yūn): a group of workers who have joined together to get better pay and make their work more pleasant, 293
tribes (tribz): groups of people living together, 114
tuatara (tōō'ä-tä'rä): lizard of New Zealand, 270

tuna (tōō'nā): an oily salt-water fish, 91
tussock grass (tūs'ūk): tall, strong grass, 283

U

United States (ū-nīt'ěd stāts): 1, 4, 7, 12, 13, 15, 21, 22, 27, 29, 31, 33, 46, 47, 70, 91, 94-95, 140, 145, 151, 165, 190, 194, 197, 200, 206, 208, 209, 265, 275, 294
up: away from the center of the earth, 196

V

veranda (vě-răn'dā): a long porch, 155
volcanoes (völ-kā'nōz): openings in the ground through which lava comes up, 254
Victoria (vīk-tōr'ī-ā): a state in Australia, 31, 175-178, 183, 210

W

Wairoa (wī-rō'ā): the town that was buried when Mount Tarawera burst open, 255, 258
wallaby (wöl'ā-bī): small kangaroo, 67
Washington, D. C. (wōsh'ing-tŭn): national capital of the United States, 31, 205
water-holding frog: frog that fills its body with water, 93
water holes: holes in the ground in which water collects, 47
waterways (wō'tēr-wāz): water passages along which boats can travel, 42
wattle (wōt'l): a flowering tree in the Australian bush, 4
Wellington (wěl'ing-tŭn): capital city of New Zealand, 289, 293-294
Western Australia: a state in Australia, 31, 87, 151, 154, 183
wet, the: the rainy season in Australia, 125
whalers (hwāl'ērz): men who hunt whales, 243
whares (hwä'rāz): huts in which the Maoris live, 239
wombat (wöm'bāt): a small marsupial of Australia, 68
wrybill (rī'bīl): New Zealand bird with a crooked beak, 267
wurlies (wûr'līs): huts in which the aborigines live, 109

Y

Yellowstone Park (yěl'ō-stōn): a national park in the United States, 253

Z

zinc (zīngk): a metal used to keep iron free from rust, 203

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